

# The Promise Continues:

75 Years of Citizen-Led  
Conservation in Missouri



Missouri Department of Conservation



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## 75 Years of Citizen-Led Conservation in Missouri

by Brett Dufur

*This book is dedicated to past and present  
Conservation Department staff, whose passion  
for conservation remains true to the vision of  
our Department's founders.*

*And, to our children's generation—who will write  
the next chapter in our conservation story.*

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*In the end we will conserve  
only what we love.  
We will love only what  
we understand.  
We will understand only  
what we are taught.*

—Baba Dioum  
Senegalese conservationist





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# Foreword

## ADVANCING MISSOURI'S OUTDOOR RESOURCES

Celebrating the Department's 75th anniversary provides a good opportunity to reflect and ask, "What is the legacy of our state's conservation efforts? Have we made a difference?"

The resources on our landscape are amazing:

- 14 million acres of forest,
- A strong deer herd and healthy turkey flock,
- Abundant aquatic resources and fish species, and
- Quality habitats that are now supporting tremendous plant diversity and wildlife, such as waterfowl, elk, and black bear.

Missouri's population of 6 million includes an astounding 1.1 million anglers, 600,000 hunters, and 2.2 million wildlife watchers. Recent surveys document high citizen interest in forest, fish, and wildlife.

What we have today is not by accident. Many have labored and sacrificed much to advance conservation and position us where we are today. Let us never forget Missouri's conservation story and the conditions of Missouri's resources in the early 1900s.

Citizen support to create an apolitical conservation agency and a management approach based on scientific research has created a conservation platform here in Missouri like no other in our nation, with constitutional authority and dedicated funding to manage forest, fish, and all wildlife (both game and non-game). Many states are still working to broaden their management completely to all wildlife.

Many in Missouri are conservation heroes recognized not just in Missouri but throughout the country. Their efforts have created and protected a forest, fish, and wildlife system of governance considered and referred to as the "nation's model."

The objectives of the 1936 Constitutional Amendment creating the Department, as documented in early writings, were:

- To protect, as far as legally possible, the administration of the state's wildlife resources from the influence of partisan politics.
- To provide for the employment of members of the staff on the basis of training and experience.
- To provide security of tenure so that the state might have the benefit, for an extended period of time, of

the training and experience of the Department's employees and thus to prevent the rapid turnover of personnel that had previously prevailed.

- To set up an agency with adequate authority to cooperate with local, state, and federal agencies, with local groups of conservationists, and particularly with the owners and users of land.
- To place authority to regulate, control, and manage wildlife resources in a non-partisan, non-salaried commission of four members, size and frequency of assembly of which would enable it to deal promptly and locally with matters of wildlife conservation.

Since 1937, 49 individuals have served as Missouri Conservation Commissioners. Conservation philosopher Aldo Leopold emphasized, "the significant importance of a sustained high average of quality Commission appointments. It is incredible how much harm can arise over a period of years from even ten percent bad selections."

Missouri has been blessed with good Commissioners. Our Commissioners have the responsibility to focus statewide—not on any select geography—to address the greatest conservation need and to work together to manage the forest, fish, and wildlife resources for Missouri's citizens. Personal gain or interest should not cloud or influence decisions.

Looking back over 75 years, several key points seem apparent. First, important building blocks of our country and state are diverse, high-quality, and abundant natural resources such as healthy forests, abundant fish and wildlife, productive waters, and rich soils.

One hundred years ago, at the 1912 Progressive National Convention, Theodore Roosevelt stated, "There can be no greater issue than that of conservation in this country," and "The nation behaves well if it treats natural resources as assets which it must turn over to the next generation increased, and not impaired in value." These words help highlight the importance of proactive citizen engagement in the conservation movement. *Conservation requires citizen understanding, support, and action that leads to solid habitat and resource management.*

Look at Missouri's example—the condition of resources in the early 1900s and the challenges faced: wildfires, low game numbers, little state conservation land, political barriers—and now look at the condition of today's resources and the associated opportunities they present.

Each of us should value and feel good about the positive difference conservation efforts continue to produce. Over the past 75 years, conservation efforts have:

- Restored and sustained dozens of wildlife and fisheries resources.
- Led the way for transforming forestry into a sustainable industry.
- Created a group of staff devoted to serving private landowners.
- Invested in the hearts of major urban areas to teach the value of the outdoor world.
- Developed an accessible network of lands, buildings, and facilities with a prominent mission—helping citizens enjoy and understand our state’s forest, fish, and wildlife resources.
- And partnered the entire way with citizens—creating a model conservation system studied by individuals around the world.

Second, *conservation pays*—Missouri today offers world-class outdoor adventures, and there is little doubt, conservation enhances our quality of life. A question frequently asked of the Department is “what have been the economic benefits of Missouri’s investments in conservation?” Combining the numbers generated by hunting, fishing, wildlife watching, and forest industries shows the importance of conservation in our state.

## CONSERVATION IN MISSOURI:

- Supports approximately 95,000 Missouri jobs.
- Involves many citizens through active participation.
  - One out of four Missouri residents hunts or fishes and one out of three citizens enjoys observing, feeding, and photographing wildlife near their homes.
- Generates positive business revenues.
  - From less than 1 percent of the state budget, conservation (forests, fish, and wildlife) produces an \$11.5 billion economic impact annually.
  - Annual spending by hunters and anglers is more than the cash receipts for cattle production, one of the state’s most valuable agricultural commodities.
  - Approximately 25 percent of Missouri’s tourism dollars are from forest, fish, wildlife, and outdoor pursuits.
  - In Missouri, adults involved in wildlife watching would fill Arrowhead Stadium in Kansas City more than 28 times.

- Economic benefits skyrocket when we consider other side benefits of managing to ensure healthy forests and abundant fish and wildlife, such as clean water, improved air quality, erosion control, benefits to society and agriculture from animals such as bats and pollinators.

Conservation is big business and conservation pays its way in our state. However, the third thing I want to emphasize is that our work is not done. Active involvement and management is essential for continued conservation progress. As a national leader in forest, fish, and wildlife management, Missouri’s conservation has not reached its destination yet. Our destination goal is 6 million Missouri conservationists—dream big! We must remember, the state’s population is our “conservation public.” Much remains to be accomplished.

The Department has “world-class” staff. I am humbled to serve with this team. Each of us carries a unique skill set and has accepted the responsibility of standing up for the conservation of forests, fish, and wildlife. We are aggressively working to proactively recognize, evaluate, and communicate tomorrow’s challenges; advancing creative ideas and proposals to address challenges; and ensuring successful results. Department staff carries much responsibility and are a significant part of why Missouri is a national leader in conservation.

As we look to the future, we stand with challenges some would say are daunting. The role and associated responsibilities of the Department to manage Missouri’s forest, fish, and wildlife resources for long-term sustainability remains essential. Challenges are diverse—such as managing resource issues, including diseases (chronic wasting disease, white-nose syndrome, whirling disease, thousand cankers) and invasive species (gypsy moth, Asian carp, zebra mussels, spotted knapweed), balancing the needs of rare and abundant wildlife, ensuring appropriate water allocations in streams, ensuring landscape-scale habitat management, ensuring public access to resources, while also openly engaging a more diverse and growing citizenry and maintaining infrastructure ranging from boat ramps, shooting ranges, trails, wetlands, and nature centers.

Things only seem to get more complicated when factors such as economic uncertainty, the rapidly changing world of technology, data management, and political challenges are added. Ensuring conservation success in Missouri is a complex task. It is important for the Department to stay above the fray and not become embroiled in special interest groups’ sometimes narrow vision of conservation.

Yes, conservation still faces challenges. This was true in 1937 when the first Missouri Conservation Commission stepped forward to serve. However, as we look to the future, I say the future is in our hands—the day is ours.

I must stress, as challenges are faced and addressed, the citizens' role is as critically important today as it was in the 1930s. From resource user, landowner, to a Conservation Commissioner, citizens remain the foundation of our state's successful conservation story. As such, educating citizens in a way that instills a land stewardship ethic—changing one's approach and mind-set—remains essential for long-term conservation success.

In 1947, reflecting back ten years on the swearing-in ceremony of the first Commission, former Senator Russell Dearmont stated, “in my opinion, this Missouri Conservation program will ultimately bring more health, happiness, and prosperity to present and future citizens of Missouri than any other state directed program.” History is proving him correct.

In conclusion, Missouri has a 75-year successful conservation track record—a truly incredible story.

There is no doubt, the future will be both challenging and rewarding. The Department strives for continuous improvement. With continued citizen support and partners, conservation's future in Missouri will be bright. Just like in 1937, the Department cannot do it alone—partners are essential.

Let us never forget how far we have come and what we have to lose. Conservation success is measured in decades. As we move forward, it remains essential for citizens to stay engaged in the dialogue with their Conservation Department. Citizen understanding and support is vital—the cornerstone of Missouri's conservation experience.

When, 75 years from now, others are reflecting back, may those following us say “they worked as a team with determination, hard work, enthusiasm, unwavering persistence, and with a sincere passion for advancing Missouri's outdoor resources.”

Thank you to all who have contributed to conservation accomplishments in Missouri. You have made a positive difference.

**Robert L. Ziehmer**

*Director*

Missouri Department of Conservation





# Preface

This book highlights the evolution of Missouri's citizen-led conservation movement and the incredible progress made by the Missouri Department of Conservation in forest, fish, and wildlife management during the past 75 years. The history of Missouri's conservation movement is often told by highlighting pivotal events. Yet history isn't truly preserved without first remembering that a movement as broad in scope as conservation consists of countless people coming together for a common cause.

The majority of Missouri's conservation heroes aren't named in this book. For them, the work has been the reward. Their legacies abound wherever one looks: in a prairie restored to glory by drip torch and sweat, in the echo of an elk's bugle among the Ozark hills, in the splash of a trout in a spring-fed stream, and in the smile of a child as she sees her first eagle. These legacies add up, and the sum is greater than its parts.

This book is about that story. The story of *what could be*. And how Missourians made it happen. It is a story long in the making. In 1987, for the Department's 50th anniversary, *Missouri Conservationist* editor James Keefe wrote a book entitled, *The First 50 Years*. It details the leadership of the Restoration and Conservation Federation of Missouri that galvanized public support to pass a state constitutional amendment in 1936 that created the Conservation Commission, which began its work on July 1, 1937.

Keefe's book also highlights the formative years of science-based forest, fish, and wildlife management and how Missouri took a leadership role in developing trained staff and implementing conservation based on science. Most importantly, Keefe's book keeps alive the names and faces of the people who fought tirelessly for conservation. Their story is now our own.

The goal of this book isn't to reproduce what Keefe already has so eloquently put into pages. Rather, for the Department's 75th anniversary, we seek to revisit with broad brushstrokes the first 50 years of the Department's

history and to invest most of our ink to the progress made in the past 25 years.

This book represents a two-year collaboration involving every Conservation Department division, a vast number of retired staff, and dozens of conservation partners. The project began as a series of 12 articles highlighting the Department's progress in forest, fish, and wildlife management, which were published in the *Missouri Conservationist* magazine in 2011 and 2012. Those articles served as the foundation for the 12 chapters that comprise the first third of this book.

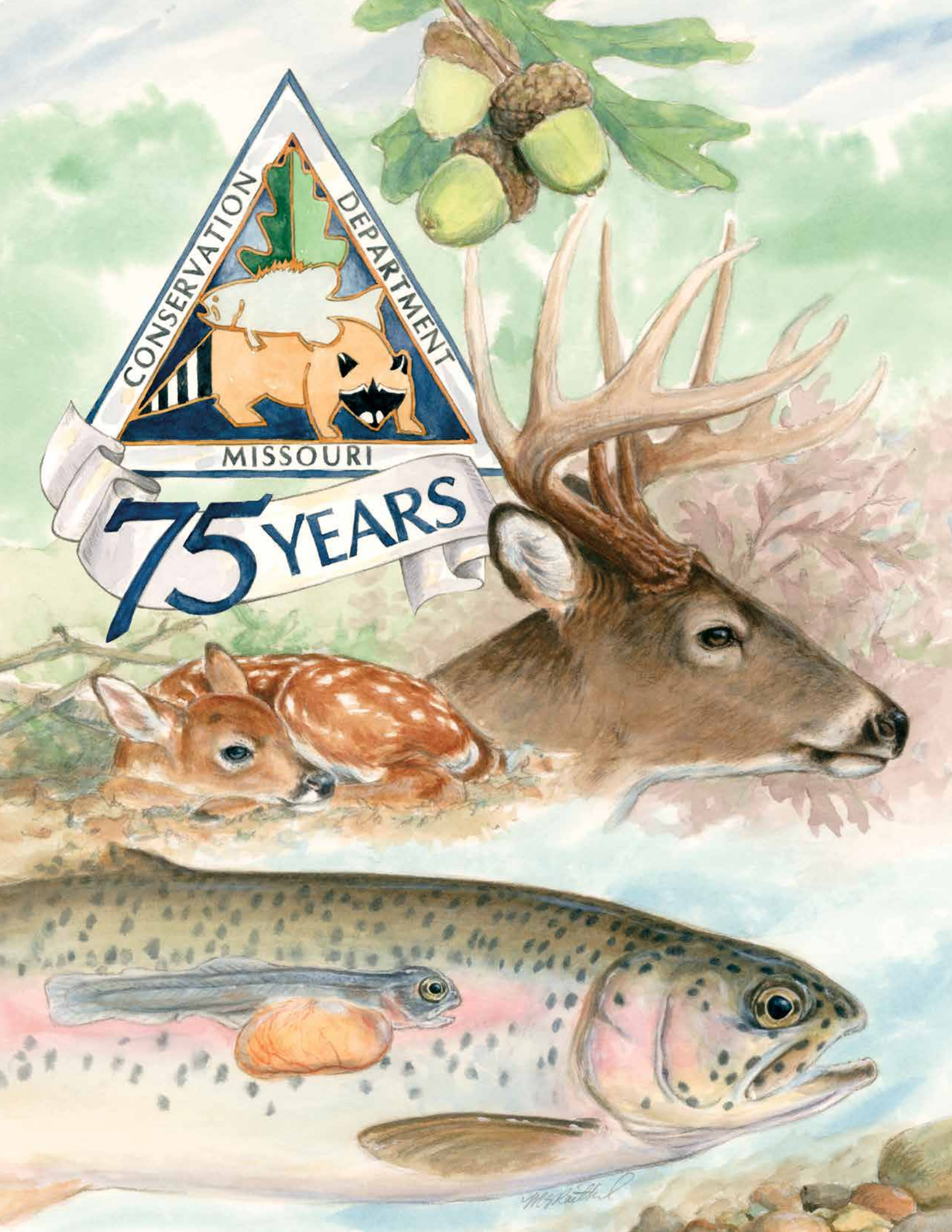
Each chapter tells a complete story. As such, readers will note the intentional repetition of key themes and messages throughout the book, including the Department's creation story, the pivotal role of citizen engagement and partnerships, the impact of the Conservation Sales Tax, and the Department's leadership role in national forest, fish, and wildlife research and programs.

The timeline that follows the chapters provides snapshots of the progress made in conservation during the past 25 years. It includes notable *Wildlife Code of Missouri* regulation changes, details on programs and partnerships, and Department milestones. Keefe's *The First 50 Years* includes an expansive Department timeline spanning from 1937 to 1987.

The final third of this book highlights the Department's Directors, Conservation Commissioners from the past 25 years, Master Conservationist Award recipients from the past 25 years, and Missouri Conservation Hall of Fame inductees. These individuals are recognized for their leadership and wellspring of enthusiasm for promoting conservation in Missouri. Each serves as proof that one person can indeed make a difference.

Keeping their stories alive sustains and invigorates Missouri's conservation legacy. May their stories inspire you to heed your own unique calling to further conservation. And may you enjoy many days outdoors in muddy boots, improving habitat and reveling in nature's gifts.

**Brett Dufur**  
*Author and Editor*



# Missouri's Unique Conservation Legacy





A SINGLE CANNON BLAST SLICED through the silence of a quiet morning on a Missouri River bend on July 4, 1804. The crew of the Lewis and Clark Expedition was celebrating the first official observance of Independence Day in the newly acquired Louisiana Purchase territory. The site today is known as Little Bean Marsh Conservation Area, located 30 miles north of Kansas City.

Among the entries in William Clark's journal that day were observations of extensive prairies, rivers, a great number of goslings, and a clear lake containing vast quantities of fish and geese. He didn't write about the oppressive July heat and humidity, the "mosquitos" or the hardships endured. Instead, Clark wrote about the abundance and variety of wildlife, which was stunning even to this veteran explorer.

*"The Plains of this country are covered with a Green Grass, well calculated for the sweetest and most norushing hay, interspersed with... trees, Spreding ther lofty branches over Pools Springs or Brooks of fine water... Shrubs covered with the most delicious froot is to be seen in every direction, and nature appears to have exerted herself to butify the Senery by the variety of flours raiseing Delicately and highly... above the Grass, which Strikes & profumes the Sensation, and amuses the mind, throws it into Conjecturing the cause of So magnificent a Senery..."*

*in a Country thus Situated far removed from the Sivilised world to be enjoyed by nothing but the Buffalo Elk Deer & Bear in which it abounds."*

His awe of the natural beauty he saw here is a powerful testament to the connection people have always felt for this land. Yet it would take only one generation of early settlers to forge an entirely different Missouri from what Clark had described.

## FROM WILDLIFE DEPLETION TO CONSERVATION ACTION

By the 1860s, the insatiable demand for fur, feathers, and meat had virtually emptied the forests. Relentless commercial hunting was rampant and unchecked. By the late 1800s, the largest lumber mill in the world came to the Ozarks to feed the booming railroad industry's thirst for railroad ties and a growing nation's need for wood products. In 1912 alone, 15 million hand-hewn railroad ties were sold in Missouri. This was also an age when a third of the Ozarks were burned each year in an effort to bring up the grasses for livestock. Missouri's forests were soon depleted.

By the 1930s, the country was in the grips of the Great Depression. Our national trust of soil, water, and wildlife were becoming similarly bankrupt. The existing Missouri Department of Game was largely a token gesture that had been weakened by powerful interests and left underfunded. Many Missourians had a deep-seated feeling that things could be better—that even though Missouri's natural resources had been squandered through overuse, proper government regulation

## THE NORTH AMERICAN MODEL OF WILDLIFE CONSERVATION

The North American Model of Wildlife Conservation is an important set of conservation principles, policies, and philosophies that has led to the protection, conservation, and restoration of wildlife populations in North America.

The North American Model of Wildlife Conservation is built on a foundation of principles, called the Seven Pillars:

### ❶ WILDLIFE AS A PUBLIC TRUST

**RESOURCE** Wildlife belongs to all citizens, not any one individual, and is held in trust by government for the benefit of present and future generations.

### ❷ ELIMINATION OF MARKETS FOR WILDLIFE

Many game species were nearly decimated by unregulated market hunting and some species were lost forever. Preventing over-exploitation and managing sustainable use is a continuous goal of conservation.

### ❸ ALLOCATION OF WILDLIFE BY LAW

Achieving wildlife benefits for present and future generations means regulations to protect and allocate wildlife resources.

### ❹ HARVEST FOR LEGITIMATE PURPOSES

Hunting and trapping are legitimate and, in some cases, necessary for management but must be carried out in ways acceptable to society. This principle includes concerns about wanton waste, protection of property, personal protection, and use.

### ❺ WILDLIFE IS AN INTERNATIONAL RESOURCE

Many wildlife species, such as waterfowl, transcend national boundaries and their management requires international agreement and cooperation.

### ❻ SCIENCE-BASED WILDLIFE POLICY

Science and good information will assist in making wildlife management decisions.

❷ **DEMOCRACY OF HUNTING** One of the most important aspects is that all citizens have access to wildlife resources, including the tradition and heritage of hunting.





**By the 1860s, Missouri's natural resources and wildlife were depleted through overuse and overhunting.**

could help restore wildlife in Missouri. This ultimately set the stage for Missouri's citizen-led effort 75 years ago to restore Missouri's forest, fish, and wildlife resources.

### MISSOURI'S CITIZEN-LED EFFORTS TAKE ROOT

On Sept. 10, 1935, nearly 100 sportsmen met at the Tiger Hotel in Columbia to discuss what could be done. They formed the Restoration and Conservation Federation of Missouri and devised a solution that was as simple as it was revolutionary. Columbia newspaper publisher E. Sydney Stephens, who became one of the leaders of the movement and later one of MDC's first commissioners, summed things up: "If you get a law passed, what have you got?" he asked. "The next legislature could repeal or amend it, and the politicians take over. By the same token, if you attempt to get a constitutional amendment through the legislature, you won't recognize it when it comes out. But if you write the basic authority exactly as you want it, put it on the ballot through the initiative and let the people vote it into the constitution—then you've got something permanent."

So they drafted Amendment 4, aimed at creating an apolitical conservation agency. Sportsmen fanned out across the state and gathered signatures to put the pro-



**E. Sydney Stephens of Columbia led the successful effort in 1936 to make conservation in Missouri both professional and apolitical. He announced at the first Conservation Commission meeting in 1937: "All life begins with the soil. Let us, then, begin with the soil."**



posals on the ballot. On Nov. 3, 1936, voters approved the measure by a margin of 71 to 29 percent—one of the largest margins by which any amendment to the state constitution had ever passed. The sportsmen's vision had prevailed.

On July 1, 1937, the constitutional amendment creating the Missouri Conservation Commission took effect, creating an apolitical, science-based conservation agency with exclusive authority over forests, fish, and wildlife. Over the next 75 years, the "Missouri plan" allowed the Show-Me State to build what is acknowledged as one of the nation's top conservation programs. Today that Commission is more commonly referred to as the Missouri Department of Conservation (MDC).

"Everything was new," recalls MDC's first chief of wildlife research, Bill Crawford, who retired after providing leadership in that role for 34 years. "It was an op-

portunistic time when we could find problems and really start to work on them."

Since that historic night at the Tiger Hotel, a series of unprecedented conservation and wildlife restoration efforts have been accomplished. "Not in their wildest imaginations could those early sportsmen have imagined what has been achieved," says Dave Murphy, executive director of the Conservation Federation of Missouri. "On the same landscape, at the same time that our human population has doubled, we've seen the restoration of wild turkey, deer, geese, river otters, raccoons, and black bass, and every kind of game species that you can imagine."

### MISSOURI'S CITIZEN-LED CONSERVATION LEGACY

Missouri conservation is unique—unique in its history, unique in the way it derives its authority and funding from citizens, and unique in the passion and com-



## MDC DIRECTORS THROUGH THE YEARS

The Department's director is hired by an unpaid citizen Conservation Commission, rather than being appointed by the governor. This provision provides the Department with a great amount of stability.



<b>I. T. Bode</b> 1937–1957	<b>William Towell</b> 1957–1966	<b>Carl Noren</b> 1967–1979	<b>Larry Gale</b> 1979–1988	<b>Jerry Presley</b> 1988–1997	<b>Jerry Conley</b> 1997–2002	<b>John Hoskins</b> 2002–2009	<b>Robert L. Ziehmer</b> 2010–present
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mitment of Missourians to perpetuate this legacy. The Show-Me State's conservation efforts have a broad management base giving consideration to forests, fish, and all species of wildlife.

The Conservation Commission serves Missourians by ensuring citizens have healthy forests, fish, and wildlife throughout the state. To achieve conservation successes the Commission and Department staff strive to promote cooperation between the Department, landowners, and the public through scientific information and mutual understanding. Conservation successes such as stable deer and turkey populations indicate that this partnership and approach has worked in Missouri.



**Missouri has a long history of successful restoration efforts. In the mid-1800s, wild turkey were brought to near extinction. Today, all 114 Missouri counties now have huntable turkey populations. Restoring prairie chickens to Missouri is a top priority of current conservation efforts.**

The Department's director is hired by an unpaid citizen Conservation Commission, rather than being appointed by the governor. This provision provides the Department with a great amount of stability and permanence, which benefit both citizens and Missouri's forest, fish, and wildlife resources.

Over the past 75 years, the Conservation Department has had only eight directors. The current director of the Department is Robert L. Ziehmer. His predecessors are I. T. Bode, 1937–1957; William Towell, 1957–1966; Carl Noren, 1967–1979; Larry Gale, 1979–1988; Jerry Presley, 1988–1997; Jerry Conley, 1997–2002; and John Hoskins, 2002–2009.

The Commission is made up of four commissioners, with no more than two from the same political party. The governor appoints and the Senate confirms commissioners for six-year unpaid terms. The Commission serves as the Department's policy maker, approves *Wildlife Code* regulations, and oversees strategic planning, budget development, and major expenditures.

The first members of the Commission were E. Sydney Stephens, A. P. Greensfelder, Wilbur C. Buford, and John F. Case. Current commissioners include Don C. Bedell of Sikeston, James T. Blair, IV, of St. Louis, Don R. Johnson of Festus, and Becky L. Plattner of Grand Pass.

### DESIGN FOR CONSERVATION

Forty years after their initial achievement, the Conservation Federation of Missouri decided that for conservation to become a permanent reality, it needed a broad, stable financial base. The vision, called the Design for Conservation, was proposed to Missouri citizens in 1970. It was a long-reaching strategic plan for conservation in Missouri. It included a pledge to obtain land for recreation, forestry, and protection of critical habitat. Design also called for increased services to the public in the areas of





wildlife and forest conservation, and for conservation nature centers throughout Missouri.

To fund the Design for Conservation, citizens petitioned to put another constitutional amendment, Amendment 1, on the ballot in 1975. The petition garnered 208,000 signatures of support, more than double the minimum required to place the proposed amendment on the ballot. The amendment called for a one-eighth of 1 percent sales tax. The vote in November of 1976 allowed for the implementation of Design for Conservation.

The conservation sales tax, as it became known, means that for every \$8 spent on taxable items, one penny goes to conservation. This dedicated sales tax provides consistent funding for the long-term efforts required for the conservation of forests, fish, and wildlife. The Department received \$95,818,338 in Fiscal Year 2011 as a result of the conservation sales tax. This revenue makes up about 58 percent of the Department's annual operating budget—no money from the state's general revenue goes to the Department. These numbers sound impressive, yet

MDC's entire budget is comparable to less than 1 percent of the entire state government budget. And conservation pays its way in Missouri—the amount of state sales tax revenue generated from fish and wildlife recreation and the forest products industry is about the same as the sales tax revenue received by MDC from the conservation sales tax.

## MISSOURIANS CARE ABOUT CONSERVATION

Missourians have achieved some amazing results. We have restored and conserved dozens of fish and wildlife species, ensured that Missouri is a great place to hunt and fish, transformed forestry into a sustainable industry, created a system devoted to serving both rural and urban private landowners, invested in the hearts of major urban areas to encourage participation in the outdoors, developed an accessible network of public lands and facilities, and partnered the entire way with citizens and communities throughout the state.

Conservation enriches our economy and our quality of life. Today, conservation—wise use—of forest, fish,



**Wise use of forest, fish, and wildlife resources has a tremendous positive impact at the individual, family, community, and state levels.**

and wildlife resources has a proven and important track record. These resources have a tremendous positive impact at the individual, family, community, and state levels. The combined numbers generated by hunting and fishing, wildlife watching, and forest industries show the importance of conservation in our state. It supports approximately 95,000 Missouri jobs, involves many Missourians through active participation, and generates positive business revenue for the state of more than \$11.5 billion annually.

Looking back, America's brush with an unwise management approach of natural resources certainly kindled

a passion for wildlife stewardship. Conservationist Aldo Leopold noted that this zeal seemed to burn intensely in Missouri. Speaking at a gathering in 1947, he said:

*"Conservation, at bottom, rests on the conviction that there are things in this world more important than dollar signs and ciphers. Many of these other things attach to the land, and to the life that is on it and in it. People who know these other things have been growing scarcer, but less so in Missouri than elsewhere. That is why conservation is possible here. If conservation can become a living reality, it can do so in Missouri. This is because Missourians, in my opinion, are not completely industrialized in mind and spirit, and I hope never will be."*

If you agree with Aldo Leopold and are not yet "thoroughly industrialized," find a way to get involved locally in conservation. You will be joining a long line of Missourians who have made the Show-Me State a beacon of conservation achievement for the rest of the world. Visit [mdc.mo.gov](http://mdc.mo.gov) to learn about conservation opportunities throughout the state.

As we celebrate the 75th anniversary of the formation of the Conservation Department, such a milestone offers an opportunity to reflect upon past challenges and chart a course for future opportunities. Through the years, the men and women who have contributed to the conservation movement have changed. But the Department's mission is still the same—to manage and protect the forests, fish, and wildlife of the state. It's a mission that provides Missourians with the opportunity to enjoy our natural resources today while leaving those resources in better shape for future generations. □

## OTHER REVENUES THAT SUPPORT MISSOURI'S CONSERVATION LEGACY

For more than 75 years, sportsmen have been buying hunting and fishing licenses. These funds are vital to restore habitat, purchase public lands, and bring back Missouri's fish and wildlife populations. When people purchase a hunting or fishing license, they are investing

those dollars in conservation for the benefit of all Missourians and future generations. Fishing and hunting licenses account for approximately 20 percent of the Department's annual revenue, totaling more than \$31 million. MDC also receives about \$22 million a year from federal sources,

including the U.S. Fish and Wildlife Service's Wildlife and Sport Fish Restoration Programs. The Wildlife Restoration Program, originally called the Pittman-Robertson Act of 1937, is a program funded by taxes on firearms, ammunition, and archery equipment. Those funds are specifically provided to states to restore, conserve, manage, and enhance fish and wildlife. The Sport Fish Restoration Program,

created by the Dingell-Johnson Act of 1950, is funded by taxes on fishing tackle, motorboat fuel, electric outboard motors, and sonar equipment. Funds are distributed to states for sport fish restoration, motorboat access development, and aquatic resource education. Federal aid also comes from the U.S. Forest Service, U.S. Army Corps of Engineers, and the Natural Resources Conservation Service.





CONSERVATION DEPARTMENT

MISSOURI

75 YEARS



# Science-Based Conservation





## DUCKS AND GESE STRAIGHT ahead!

Excited chatter on the headset interrupts the steady drone of the engine, as the small single-prop plane reaches the extensive wetlands at Grand Pass Conservation Area. Through the early morning haze, a virtual sea of birds—tens of thousands of waterfowl on their yearly migration—comes into view below.

For the next pass, the pilot banks and drops low. MDC Resource Scientist Andy Raedeke cranes his neck and begins counting the vast moving mass of birds. The plane follows a grid flight pattern for half an hour. His final calculation: 70,000 mallards, 15,000 green-winged teal, 10,000 pintails, 4,000 gadwalls and widgeon, 1,000 coots, and 500 ring-necked ducks.

Raedeke's aerial counts help biologists learn how many waterfowl visit Missouri, when they migrate, and where they stop to eat. The information helps set hunting seasons and lets wetland managers know how much habitat to provide.

Raedeke contributes not only to waterfowl conservation efforts in Missouri but also to efforts that span from Canada to Mexico. He also helped write the 2012 North American Waterfowl Management Plan.

## ROOTED IN SCIENCE

Raedeke and countless other Department resource scientists create the foundation of science and research that continue to advance the Department's mission to conserve the state's forests, fish, and wildlife. Since the Department was founded in 1937, using science rather than politics to guide decisions has been at the heart of science-based conservation.

"One of the tenets of science-based conservation is using facts and data to assist in making wildlife management decisions," says Dan Zekor, MDC research center unit chief. "Science served as the foundation for our conservation efforts 75 years ago, and that tradition continues."

Most Missourians would assume this is business as usual, but many other states "struggle to get their best information on the table for consideration," says Zekor. "We are fortunate that good science and public input guide fish and wildlife management."



Many of the Department's early forest, fish, and wildlife management programs were based on a 1937 wildlife survey that laid the groundwork for the conservation tasks ahead, such as beaver releases (shown above). Other tasks included restocking programs, closed seasons for deer and turkey, and extensive habitat work.

## PIONEER IN SCIENCE-BASED CONSERVATION

The Conservation Commission, even in its infancy in the late 1930s, placed high value on the need for solid information to facilitate decision-making. The first commissioner wrote, "Regarding research, the Commission recognizes that it cannot perform an intelligent job of enforcement, regulation, or management without sound basic facts. Fact-finding and research are therefore essential before the Commission reaches any conclusions on important matters."

Put simply, science and research provide the information needed to address a host of natural resource management issues. Many of the Conservation Department's early forest, fish, and wildlife management programs were based on a 1937 wildlife survey by biologists Rudolf Ben-nitt and Werner Nagel. Their findings were grim. Only 2,500 turkeys and 2,000 deer remained in the state. Prairie chickens, ruffed grouse, beavers, otters, and raccoons also were scarce. Other species, such as elk and buffalo, were gone from the state. This early survey laid the groundwork for the conservation tasks ahead, including restocking programs, closed seasons for deer and turkey, and extensive habitat improvement work.



“When we first started to work, there wasn’t a deer season, and deer had to be transported and introduced into new areas. And there was no turkey hunting,” says Libby Schwartz, retired MDC resource scientist. “Each of us was given a project to work on. And we feel like we did see a lot of progress in a lot of species. So, I’m real proud of that.”

### PARTNERSHIPS ADVANCE SCIENCE

In 1937, the first official act of the Conservation Commission was to support the creation of a Cooperative Wildlife Research Unit at the University of Missouri–Columbia, which worked hand in hand with early Department biologists to advance the newly formed discipline of wildlife management.

Today, the Coop Unit is a partnership between MDC, the University of Missouri’s School of Natural Resources, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, and the Wildlife Management Institute. This collaborative relationship, with its emphasis on good science to inform natural resources management, benefits all partners in many different ways.

“The partnership between MDC and the University of Missouri’s (MU) Fisheries and Wildlife Sciences

**MDC Resource Scientist Andy Raedeke’s aerial counts help biologists learn how many waterfowl visit Missouri, when they migrate, and where they stop to eat. The information helps set hunting seasons and lets wetland managers know how much habitat to provide.**

Department, in generating the science upon which conservation decisions are made, goes back to the very beginning of wildlife management as a profession,” says Mark Ryan, director of MU’s School of Natural Resources. “This partnership between a state agency and a land-grant university was among the first anywhere and remains a model for other states and nations.”

Because of the diversity of fish and wildlife resources in Missouri, the Coop Unit pursues a broad focus of research, although it has long emphasized waterfowl ecology, big river ecology and management, and stream fishery resources.

“The Missouri Unit has a strong record of serving the science and education of its university, state, and federal partners,” says Ken Williams, chief of the U.S. Geological Survey’s Cooperative Research Units national program. “The success of the Coop Unit has





**Long-term monitoring of Missouri's natural resources is foundational to understanding biological trends and forms the basis of the Department's science-based conservation efforts. MDC encourages landowner efforts to reestablish shortleaf pine plant communities through technical assistance and by developing pine markets.**

relied on the long-standing support of the Missouri Department of Conservation, which has been at the forefront among state agencies in integrating science discovery and its application to solve real natural resources problems.”

Learn more at [coopunits.org/Missouri](http://coopunits.org/Missouri).

## LEADER IN SCIENCE-BASED CONSERVATION

Missouri has a long legacy of creating and implementing science-based conservation. “Many forest, fish, and wildlife management techniques used around the world today were developed by MDC researchers,” says Mike Kruse, MDC Resource Science Division chief. “We were the first to use and evaluate length limits in fish populations, the first to develop artificial feeds for rearing trout, the first to rear hellbenders in captivity, and the list goes on and on. When you look back at the research, science, and management techniques developed by the Department, you realize we are truly standing on the shoulders of giants.”

In one example of early Department research, after Lake of the Ozarks and Truman reservoirs were established, wild paddlefish movements upstream to spawning habitats were blocked. To provide recreational paddlefish angling opportunities, Department biologist Charles Purkett found paddlefish eggs and fry, and studied paddlefish spawning requirements. Department biologist Tom Russell and Hatchery Manager Jerry Hamilton learned how to hatch and rear paddlefish to boost their numbers. Missouri now has some of the best paddlefish fisheries in the country, thanks in large part to those early conservation efforts.

In another example of early Department research, biologists Allen Bohn and LeRoy Korschgen developed a precipitin test to distinguish deer meat from other meats. This test was allowed in courts and has assisted conservation agents in prosecuting deer poachers. Today, conservation agents still rely on sound scientific evidence to solve wildlife crimes. Modern-day techniques utilizing DNA testing now help conservation agents bring deer poachers to justice.

Several recent science-based conservation successes benefit the hellbender, an endangered aquatic salamander. Department Herpetologist Jeff Briggler and Hatchery Manager James Civiello successfully collected and hatched hellbender eggs from the wild. Working in collaboration with the St. Louis Zoo, they have successfully reared juvenile hellbenders for release back into their native streams.



In addition, Briggler, Fisheries Management Biologist John Ackerson, and Fisheries Technician Chuck Wichern successfully pioneered the use of artificial nesting structures for wild hellbenders in Ozark streams. Biologists in other parts of the country are now using these structures to increase the numbers of this declining salamander.

“We’ve always had some of the best people in conservation, who have used science to guide their work. They are leaders in their respective fields and are frequently invited to other states and even other countries to help solve complex conservation problems,” says Kruse.

### LONG-TERM MONITORING

Long-term monitoring of Missouri’s natural resources is foundational to understanding biological trends and forms the basis of the Department’s science-based conservation efforts.

“The Department’s biologists and foresters have countless long-term monitoring efforts underway, many of them with decades or more of historical data,” says Kruse. “This information allows us to track the status of forest, fish, and wildlife resources, and do a better job of managing them in the future.”

Missouri’s biggest outdoor laboratory is the forest itself, where a 100-year study is now underway. Launched in 1990, the Missouri Ozark Forest Ecosystem Project (MOFEP) is monitoring how different management practices affect a more than 9,000-acre expanse of Ozark forest.

“Forests operate on a different time scale than people. To understand them, you have to work on their time scale. The longer we stay with our study, the better we will understand how to sustainably manage Ozark forests,” says MOFEP Field Coordinator Randy Jensen.

MOFEP seeks to answer how different forest management practices influence abundance and reproductive success of birds, tree growth, species composition and regeneration, and how much carbon Ozark forests sequester. This collaborative research project involves biologists and foresters from the Department, U.S. Forest Service, the University of Missouri, Missouri Department of Natural Resources, and numerous other agencies and universities. Learn more at [mofep.mdc.mo.gov](http://mofep.mdc.mo.gov).

“This is an ambitious project unlike anything else of its kind,” says MDC State Forester Lisa Allen. “The more we learn, the better job we can do at managing Missouri’s forests. Since forests are always evolving and changing, that’s where we need to be—using the forest as a classroom, to study it in real-time.”



**Missouri has become an international leader in crayfish research and conservation because the Department and partner agencies recognize that crayfish literally fuel many of our sport fisheries. They contribute substantially to the state’s biodiversity and to the productivity of many other wildlife species in and around Missouri water bodies.**

Long-term monitoring also helps biologists better understand how to manage Missouri’s waters and improve the state’s fisheries. “Thanks to our science-based approach to conservation, we now have a much deeper understanding of how our natural resources function,” says Bob Hrabik, a MDC biologist specializing in fish taxonomy and natural history.

“In the Department’s early years, checking the catch of an angler—called a creel census—was a primary way to keep tabs on fish populations. Over time, science-based techniques and technology have evolved, offering today’s Department biologists a much broader range of tools and methods to survey and track the health and changes of Missouri’s fisheries,” says Hrabik. “Some examples include improved trawling and electrofishing methods, the use of reward tags and surgically implanted data storage tags in telemetry studies, and collaborating with other state and national fisheries monitoring efforts. These techniques allow us to study fish movements, describe patterns in migratory behavior, and predict spawning success with many species, including sturgeons, paddle-





fish, catfish, and many other recreationally and commercially important fish.”

The Department’s Resource Assessment and Monitoring Program (RAM) monitors long-term trends in the health of Missouri’s warm-water, wadeable streams. This database helps direct conservation work to where it is needed most. Sampling sites are chosen at random from 17,507 miles of permanently flowing, but wadeable, Missouri streams.

“The program’s focus is on the living organisms in streams because their well-being is the ultimate goal of our stream conservation efforts,” says Matt Combes, Department resource scientist and RAM coordinator. “Fish and macroinvertebrates are affected differently by water quality and disturbed habitat, so it is important to sample a variety of organisms.”

One of the state’s longest, continuous monitoring programs is the Long Term Resource Monitoring Program for the Mississippi River. Staff at the Big Rivers and Wetlands Field Station in Jackson monitor a 50-mile stretch of the Mississippi River and provide managers, scientists, and decision-makers with information on the long-term changes in fish communities, water quality, riverbank vegetation, and land use.

To further monitor and improve forest, fish, and wildlife management, MDC operates five field stations around the state, in Kirksville, Clinton, West Plains,

**“In the Department’s early years, checking the catch of an angler—called a creel census—was a primary way to keep tabs on fish populations,” says Bob Hrabik, MDC biologist. Today, Department biologists have a broad range of methods, such as electrofishing, to track the health and changes of Missouri’s fishes.**

Chillicothe, and Jackson. Each field station has statewide responsibility for a designated ecological system: agricultural, grasslands, forests, and large rivers and wetlands along the Missouri and Mississippi rivers, respectively.

“Field stations advance resource management by investigating questions surrounding forest, fish, and wildlife management,” says Rochelle Renken, MDC resource science field chief. “At the field stations, researchers and managers work together to develop and evaluate solutions to management challenges. Examples of such collaborative work are evaluations of prairie chicken translocations, the effects of prescribed burning on the wood-product value of trees, and wildlife use of federally funded conservation practices in agricultural landscapes.”

## BALANCING THE NEEDS OF PEOPLE AND WILDLIFE

Science-based conservation balances the needs of people and wildlife. How Missourians use and interact with the state’s forests, fish, and wildlife is taken into account when making management decisions.



**The process for adding or changing regulations, such as hunting season dates, in the *Wildlife Code* begins with evaluating the science-based needs for the change in addition to obtaining feedback from the public.**

“Citizen input and involvement are critical to conservation,” says MDC Director Robert L. Ziehmer. “Part of delivering excellent public service is to listen and understand what Missourians say about conservation programs and services. The challenge is gathering public opinion in a way that is scientifically sound and unbiased.”

In 2011, these efforts included a survey of firearms deer hunters, a landowner and deer survey, a survey of small-game hunters, a survey of spring turkey hunters, 16 waterfowl season meetings, a timber price survey, and visitor surveys at Springfield and Powder Valley Conservation nature centers. This information helps guide decisions about regulations and resource management.

“Surveys tell us that 91 percent of Missourians are interested in Missouri’s forests, fish, and wildlife. And that a majority of Missourians feel the Department of Conservation is doing a good or excellent job of providing services to them, their families, community, and the state,” Ziehmer says.

## REGULATIONS

In the early days of the Department’s existence, regulations may have focused only on the need to protect species by designating open or closed hunting and fishing seasons. Today, developing regulations to support fish

and wildlife management is vastly more complicated. The process for adding or changing regulations in the *Wildlife Code* begins with evaluating the science-based needs for the change in addition to obtaining feedback from the public.

“In the case of deer management, we must consider not only what is good for deer, but also the social carrying capacity—what number of deer people will tolerate, which is a much lower number than the biological carrying capacity,” says Jason Sumners, MDC deer biologist.

“We also take into account changing attitudes. Each year, the Department measures deer hunter attitudes and tracks trends. All of these surveys and scientific measures allow us to make well-informed decisions. Collecting long-term data and modeling that information is what allowed us to develop and implement the 4-point antler restriction regulation we now have in place,” says Sumners.

## THE PROMISE CONTINUES

The promise to work with Missourians, and for Missourians, for wildlife restoration and conservation continues today. In 2011 and 2012, elk were released in a defined restoration zone in Carter, Shannon, and Reynolds counties. Wild elk, formerly abundant in the state, had not been seen in Missouri since 1865.

Science-based conservation is also helping biologists study black bear populations, hatcheries staff improve state fisheries, landowners create better habitat for quail and prairie chickens, and is giving a number of state and federally endangered species a fighting chance. Many other conservation success stories are also grounded in the science created, honed, and implemented by numerous Department biologists over many decades.

What began 75 years ago as a “grand experiment” in conservation has evolved into today’s Department—a national leader in forest, fish, and wildlife management and conservation—with management decisions guided by sound science. That science balances the needs of Missouri’s people with the needs of the state’s forests, fish, and wildlife.

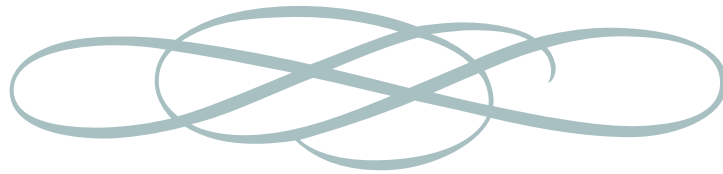
“Nationwide, the Missouri Department of Conservation is looked up to because we have led the way for so long,” says Glenn Chambers, retired MDC biologist and filmmaker. “And we’ve done a good job of delivering what we’ve promised. That goes a long way with keeping the public with you.” □





*W. Skiff*

# Partnerships: The Cornerstone of Conservation





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EAMWORK OFTEN BEGINS WITH A HANDSHAKE: friends helping friends and neighbors helping neighbors. That same spirit is at the heart of Missouri's conservation community, which includes thousands of individuals making a difference for Missouri's forest, fish, and wildlife in their own unique way.

Conservation partnerships create a sum that is greater than its parts. Working together leverages the limited resources available to benefit the most wildlife species and habitat. Partnerships are vitally important for conservation to work in Missouri, because the Conservation Department is relatively small compared to other state agencies. MDC's entire budget is less than 1 percent of the entire state government budget. No money from the state's general revenue goes to the Department. Partnerships are able to extend the reach of conservation work into areas that would otherwise be impossible.

"The management of Missouri's forests, fish, and wildlife involves partnerships with citizens, organizations, and other agencies," says MDC Director Robert L. Ziehmer. "We value citizen involvement, which truly serves as the backbone of Missouri's conservation successes."

## TWO IMPORTANT PARTNERS: THE FEDERATION AND THE FOUNDATION

Two important partnerships in conserving forest, fish, and wildlife resources are the Conservation Federation of



**Missouri Stream Teams wouldn't be possible without the help and coordination of the Conservation Federation of Missouri, the state's oldest and largest private citizen conservation organization.**

Missouri and the Missouri Conservation Heritage Foundation. These groups enhance the work of conservationists throughout the state. Other important partnerships involving volunteers, state and federal agencies, and other conservation organizations are highlighted throughout this book.

## ALL MISSOURIANS CONTRIBUTE TO CONSERVATION SUCCESS



The teamwork of tens of thousands of Missourians to improve Missouri's natural resources is remarkable. In 2011, volunteers donated more than 273,000 hours in MDC-sponsored conservation efforts. Dedicated Missourians donated their time through conservation nature centers, shooting ranges, hunter and bowhunter education, Master Naturalists, and Stream Teams. MDC also works with more than 24,000 landowners in the state through a variety of programs to improve their property to benefit wildlife.

**Pat Jones visits Prairie Fork Conservation Area that she and her late husband, Ted, donated to MDC.**

Every Missouri hunter and angler is also an important partner in conservation. For more than 75 years, hunting and fishing license revenues have been vital to restore habitat, purchase public lands, and bring back Missouri's fish and wildlife. When a person purchases a hunting or fishing license, they are investing those dollars in conservation for the benefit of all Missourians and future generations.

And in the end, every Missourian is a partner in conservation thanks to the conservation sales tax, which allocates 1 penny to conservation efforts for every \$8 of taxable items purchased. This dedicated sales tax provides consistent funding for the long-term efforts required for the conservation of forests, fish, and wildlife.





## CONSERVATION FEDERATION OF MISSOURI

Up until the early 1900s, natural resources were thought of as something that might eventually disappear. Early fish and wildlife management approaches attempted to stretch out dwindling resources, rather than to improve wildlife populations and create habitat. Then, in the early 1900s, President Theodore Roosevelt recognized “conservation through wise use” as a public responsibility and recognized science as a tool for fulfilling that responsibility.

A new era of conservation-minded leaders, sportsmen, and citizens were beginning to form a strategy to bring back wildlife. On Sept. 10, 1935, nearly 100 forward-thinking Missourians gathered at Columbia’s Tiger Hotel to discuss the sad state of Missouri’s forests, fish, and wildlife. They formed the Conservation Federation of Missouri and launched a movement to revolutionize natural resource management.

They worked tirelessly to put a proposal for a new science-based Conservation Commission on the ballot.

**A recent sizeable donation to the Missouri Conservation Heritage Foundation allowed MDC to purchase 171 acres in the LaBarque Creek watershed (shown above) to ensure long-term protection and public use of the area.**

On Nov. 3, 1936, voters approved the measure by one of the largest margins by which any amendment to the state constitution had ever passed.

On July 1, 1937, the constitutional amendment creating the Missouri Conservation Commission took effect, and with it the Department of Conservation (MDC) was formed. This new Department had constitutional authority for the management of Missouri’s forests, fish, and wildlife. Over the next 75 years, the “Missouri plan” allowed the Show-Me State to build what is acknowledged as one of the nation’s top conservation programs.

But the Conservation Federation of Missouri didn’t stop there. From the original 100, its ranks have grown to



tens of thousands. The Federation became known as “the strong right arm of conservation.”

“That engagement of citizens in conservation is what it’s all about. The bottom line of one of President Roosevelt’s most succinct comments is that, ‘Wildlife and its habitat cannot speak, so we must, and we will,’” says Dave Murphy, executive director of the Conservation Federation of Missouri.

Today, the Federation continues to actively lead and support conservation efforts in Missouri and throughout the nation. It is the state’s oldest and largest private-citizen conservation organization, with more than 90,000 individuals and 80 affiliated groups.

Since its successful early efforts, the Federation has undertaken many other battles to ensure that Missouri remains the nation’s conservation leader. In 1976, it spearheaded a successful citizen initiative for the one-eighth of 1 percent conservation sales tax. This dedicated sales tax provides stable funding for the long-term efforts required for the conservation of forests, fish, and wildlife.

“The wildlife of our state belongs to every citizen. This really has been underscored by the passage of the Design for Conservation sales tax in 1976 that formally made every citizen of our state an owner/operator, not only of wildlife but of conservation,” Murphy says. “And we have the many benefits of that, economically and otherwise. But we also have a responsibility for caring for it, and understanding it, and making sure that it continues in the future.”

To ensure that conservation remains a reality in Missouri, the Federation continues to operate as a watchdog. The Federation’s members work to enhance the future of their favorite outdoor traditions through internal com-



**Since it began administering the Stream Stewardship Trust Fund in 2000, the Missouri Conservation Heritage Foundation has raised and dispersed more than \$3 million for priority stream protection efforts, such as the Niangua darter (shown above) found only in Missouri.**

mittees that advise government agencies and represent conservation interests in the Missouri Legislature and Congress. But the Federation isn’t all about lobbying and constitutional amendments.

Over the years, the Federation has helped to develop and coordinate some of the most innovative and successful citizen-action programs in the world, including Missouri Stream Teams, Operation Game Thief, Project Forest Arson, Share the Harvest, and the annual Conservation Leadership Corps. These opportunities have allowed Missourians to get involved in conservation and have served as models for other states.

Like the 100 sportsmen who came together back in 1935 to define conservation, today’s Federation members

## ORGANIZATIONS PARTNER FOR CONSERVATION SUCCESS

Some of MDC’s partners work on continental-scale conservation, like Ducks Unlimited, the U.S. North American Bird Conservation Initiative, and Partners in Flight. Other partners, such as Joint Ventures and the Association of Fish and Wildlife Agencies, take a more regional approach. Some MDC

partners work on specific groups of species or specific habitats, such as Audubon Society, Quail Forever, Trout Unlimited, the National Wild Turkey Federation, the Rocky Mountain Elk Foundation, and The Nature Conservancy, to name but a few. Still other partners focus specifically on conserving habitat for Missouri fish and wildlife, such as the Missouri Prairie Foundation, Missouri Bird Conservation Initiative, Missouri Stream Teams, Master Naturalists, and many more. All of these

diverse organizations, plus many others, work together with Missourians in a meaningful way to encourage conservation where it is needed most.

“Partnerships between government and citizen conservation groups make it possible to achieve things beyond our separate means. It is a model that has proven successful time and time again and is responsible for Missouri’s—and America’s—greatest conservation success stories,” says MDC Director Robert L. Ziehmer.

## AGENCIES PARTNER FOR CONSERVATION SUCCESS

MDC also partners with state and federal agencies. Missouri state agency partners include the Department of Agriculture, Department of Transportation, Department of Natural Resources, the Highway Patrol, and others. Federal partners include the U.S. Fish and Wildlife Service, the U.S. Forest Service, the U.S. Army Corps of Engineers, the U.S. Department of Agriculture, and the National Park Service.

Through the Farm Bill, the U.S. Department of Agriculture administers the Wetlands Reserve Program (WRP) and Conservation Reserve Program (CRP) to help Missouri's landowners protect, restore, and enhance wildlife habitat. Missouri is one of the top ten states in the nation in acres of habitat conserved in both programs.

Another important federal partnership is with the U.S. Fish and Wildlife Service. MDC receives funds from the Wildlife and Sport Fish Restoration programs, which are also celebrating 75 years of success. Federal excise taxes paid by sportsmen and fishermen in the state on firearms, ammunition, archery equipment, fishing tackle, motorboat fuel, electric outboard motors, and sonar equipment are returned to MDC to restore, conserve, manage, and enhance fish and wildlife, develop motorboat accesses and shooting ranges, and to help fund angler, hunter, and aquatic resource education.

are average citizens. Yet, they have the satisfaction of making conservation history.

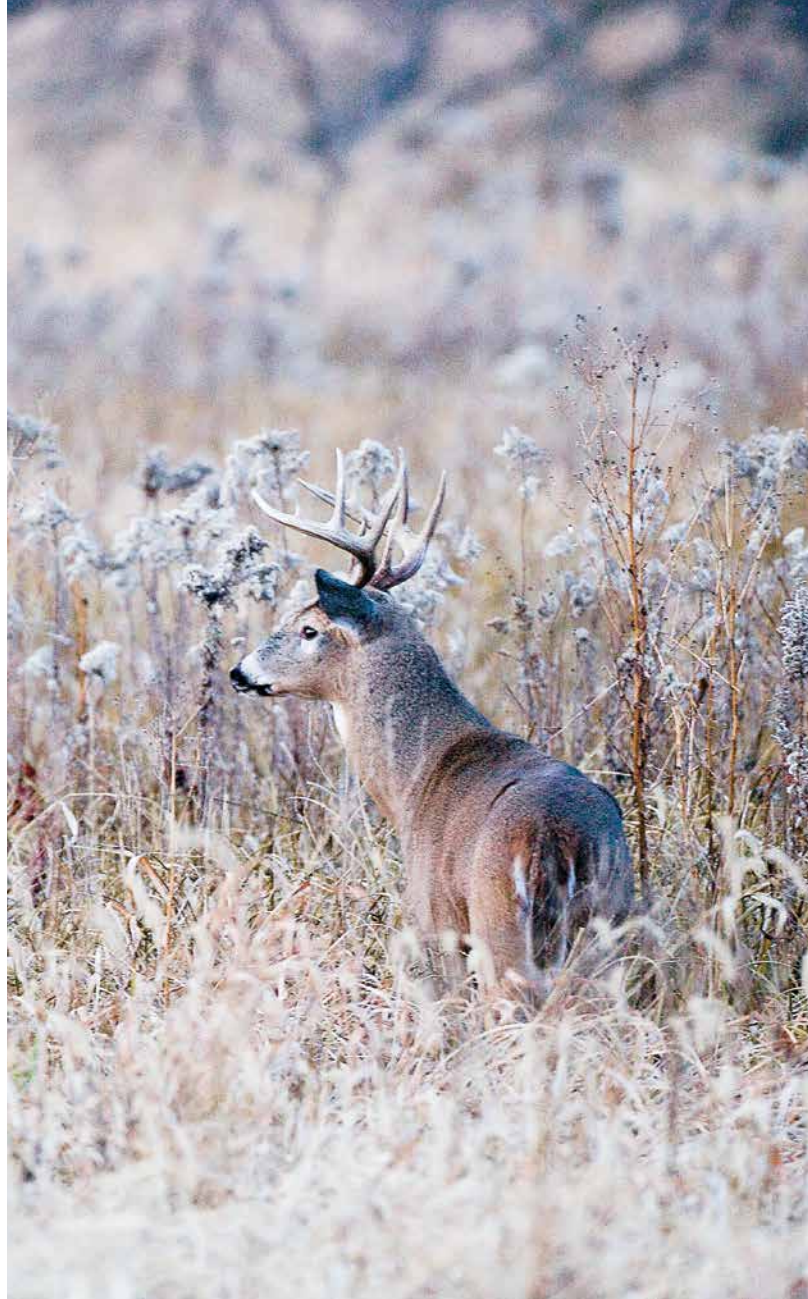
### MISSOURI CONSERVATION HERITAGE FOUNDATION

Even with the work done by the Conservation Department, the Conservation Federation of Missouri and many other groups, the opportunities to conserve forests, fish, and wildlife are never-ending. The resources needed to meet those challenges, however, are not.

Conservation takes funding, and funding is always a challenge. That's where the Missouri Conservation Heritage Foundation steps in—to help fund many conservation and conservation-related outdoor recreation projects that might not happen otherwise.

"The conservation community in Missouri is well coordinated. This allows the most habitat and species to benefit from their work," says Rick Thom, executive vice president of the Missouri Conservation Heritage Foundation, "and allows the conservation community to leverage the relatively small amount of funds available to conserve nature in Missouri."

The Foundation is separate from MDC but supports its mission. "By working with MDC staff who have identified areas of greatest conservation priority, we fund projects that address immediate conservation and outdoor-recreation needs," Thom says.



**Partnerships between MDC and other state and federal agencies double the efforts of restoring, conserving, managing, and enhancing fish and wildlife in Missouri.**

"Missourians are fortunate to have the conservation sales tax to help fund worthy projects and activities," says Thom, "but sales tax revenues cannot always keep pace with needs. This is why the Foundation was created—to provide an additional stream of revenue for conservation, and to provide donors with an easy way to contribute to conservation projects and initiatives that are important to them."

One of the Foundation's first projects was to raise \$3.6 million to aid in the construction of the Anita B. Gorman Conservation Discovery Center in Kansas City. Today, the nature center hosts more than 31,500 students and visitors annually.



The Foundation has partnered with other conservation groups to fund many projects, as diverse as the outdoors. With the help of several sizeable donations and the Foundation's Stream Stewardship Trust Fund, the Foundation helped invest more than \$2 million to protect land in the 8,365-acre watershed of LaBarque Creek in Jefferson County. This remarkable stream supports an astonishing 44 fish species. In addition, the surrounding area provides outdoor recreation opportunities and wildlife habitat only a short distance from St. Louis.

In another project, the Foundation granted \$55,500 to help The Nature Conservancy, the Central Hardwoods Joint Venture, and MDC acquire 80 acres of impor-

tant bird habitat along the Current River, one of North America's most biologically diverse streams.

The Foundation is also a partner of the Avian Conservation Alliance, which includes seven Audubon Missouri chapters and MDC. Partnerships, like migratory birds, can span continents. By working together, these partnerships ensure that "our birds" return each spring. Current projects focus on habitat protection, restoration, and bird monitoring in Mexico's Yucatan Peninsula near Cancun, and in Central America.

The Foundation is funded by sales of Conservation Heritage license plates, private and public grants, and individual donations. In addition, the U.S. Army Corps of Engineers, when enforcing the Clean Water Act, can assess fines to developers who damage Missouri streams. Those fees can be deposited into the Foundation's Stream Stewardship Trust Fund for stream protection and restoration projects.

**MDC is a member of the Avian Conservation Alliance, whose projects include habitat protection, restoration, and bird monitoring in Mexico and Central America.**



**Male common yellow-throated warbler**



## CELEBRATING PARTNERS

Many important conservation partnerships are highlighted in this 75th anniversary book. This chapter highlights the important role of Missouri's largest membership-driven conservation group—the Conservation Federation of Missouri, as well as the Missouri Conservation Heritage Foundation, which funds conservation work throughout the state.

Other chapters feature important partnerships such as:

- **Chapter 2:** University of Missouri–Columbia and the Cooperative Wildlife Research Unit
- **Chapter 4:** The Nature Conservancy and the Missouri Prairie Foundation
- **Chapter 5:** Missouri's rural fire departments, Missouri Forestkeepers Network, Forest ReLeaf of Missouri, Missouri Community Forestry Council, and the National Arbor Day Foundation
- **Chapter 6:** Trout Unlimited
- **Chapter 7:** The National Wild Turkey Federation and the Rocky Mountain Elk Foundation
- **Chapter 8:** Ducks Unlimited
- **Chapter 9:** Stream Teams and the Department of Natural Resources
- **Chapter 10:** U.S. Department of Agriculture Natural Resources Conservation Service
- **Chapter 11:** Nature center volunteers and hunter education instructors

Founded in 1997, the Foundation has provided more than \$12 million for conservation and outdoor recreation. In 2011, it funded 24 projects totaling more than \$108,000.

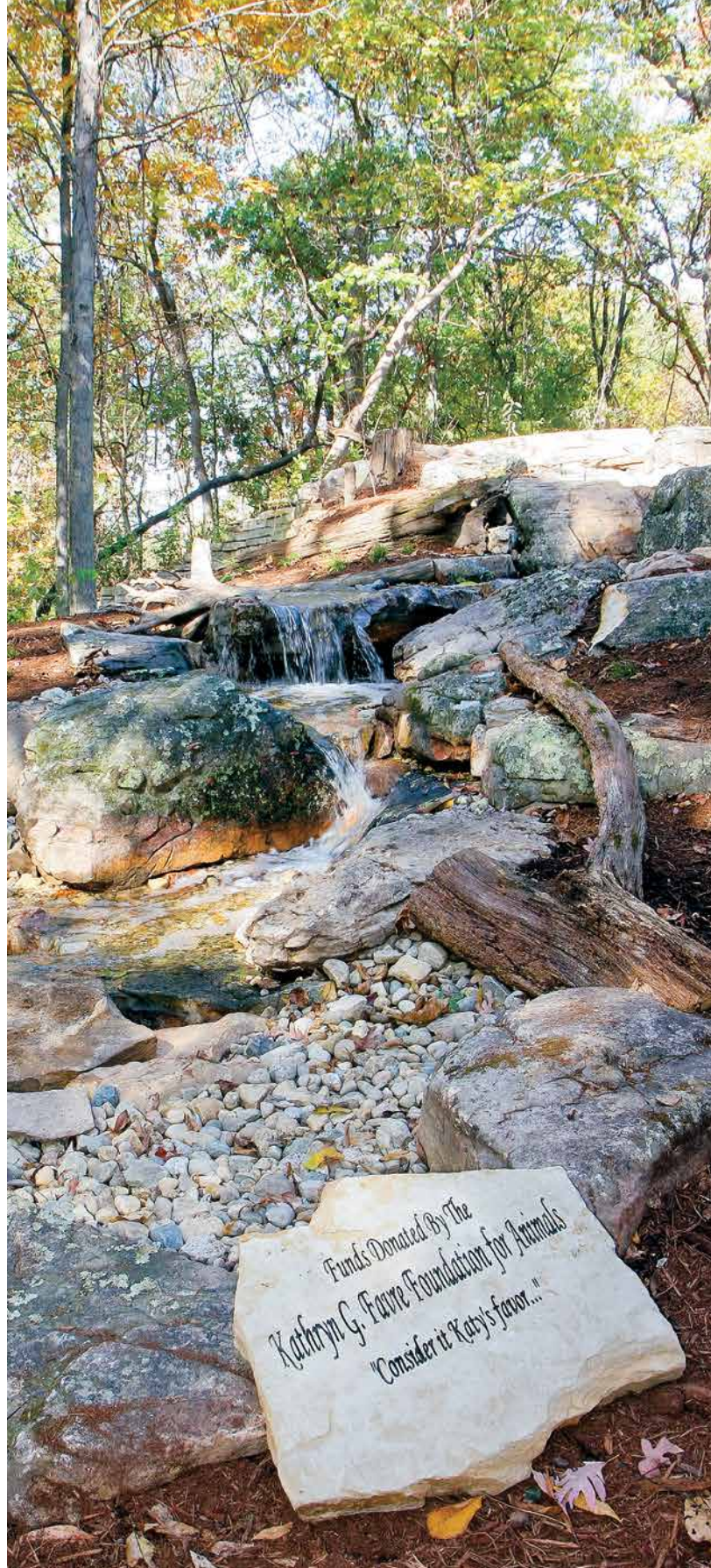
Missourians who want to support conservation but don't know where to start can choose from a number of categories set up by the Missouri Conservation Heritage Foundation. To invest in your conservation legacy, direct donations to activities or programs you find meaningful.

"The Foundation provides a way for people to protect the places they love or to promote an activity, such as fishing, that has provided a lifetime of fulfillment," says Anita B. Gorman, former Conservation Commissioner.

To learn more about the Foundation, visit [mochf.org](http://mochf.org) or call 1-800-227-1488.

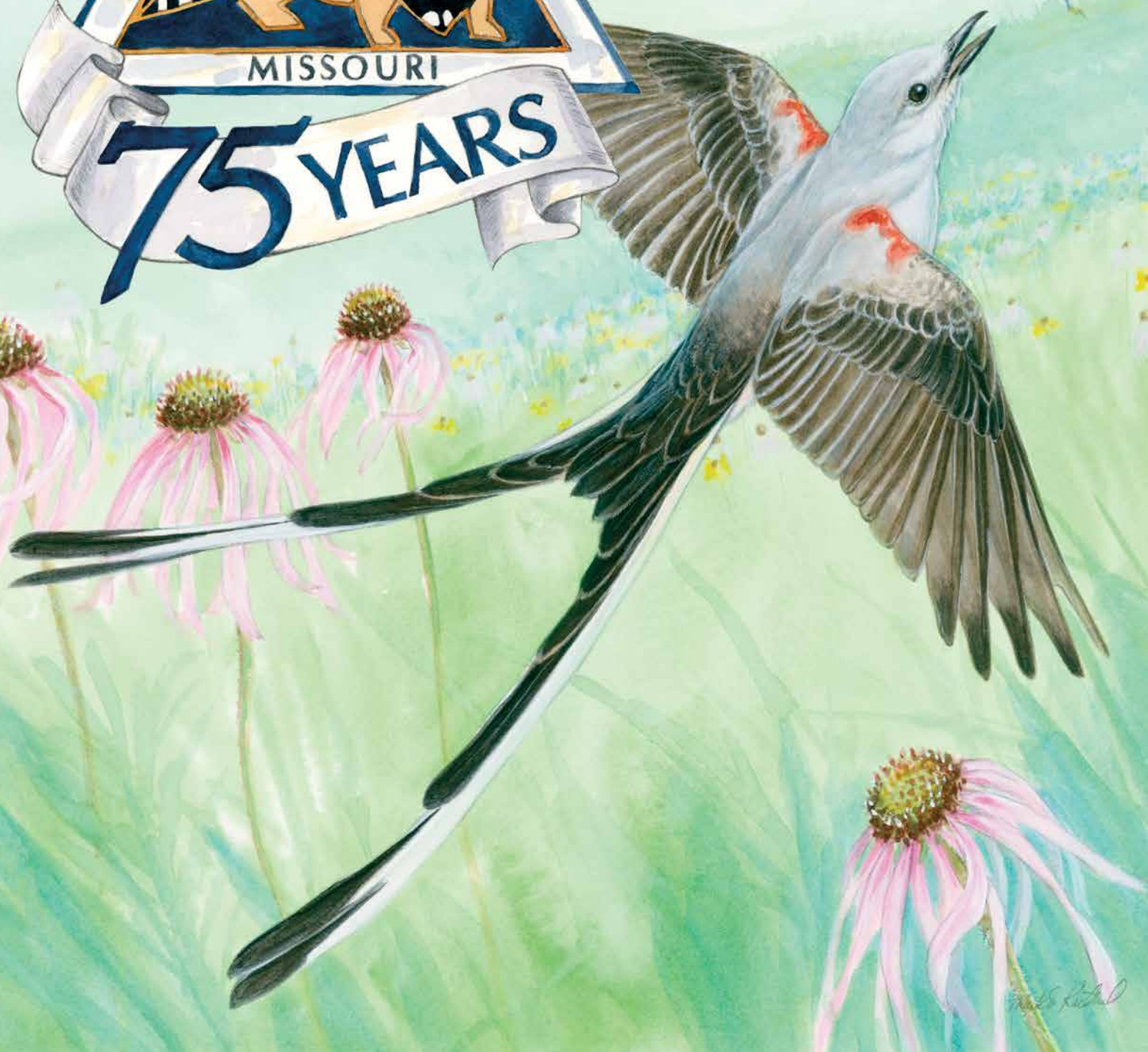
## MISSOURIANS CARE ABOUT CONSERVATION

Like most investments, the steps on the road to conserving Missouri's forest, fish, and wildlife resources are small and numerous, slowly building over many years or decades. Yet, Missourians have not lost sight of the long-term returns that conservation efforts will yield for generations to come. □



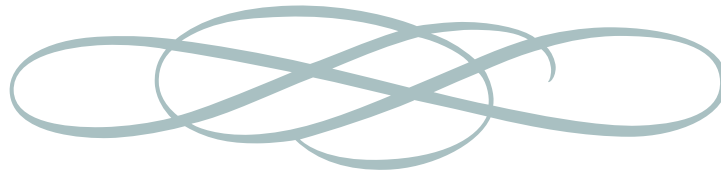
With the help of the Missouri Conservation Heritage Foundation, the Kathryn Favre Foundation for Animals donated a new waterfall to the Powder Valley Conservation Nature Center near St. Louis.







# Conserving Public Lands



**F**OR THE PAST 75 YEARS, MDC HAS been developing an extensive network of conservation areas. These are the places we go to hunt, fish, hike, bird watch, and enjoy nature. The Department's aim has been to balance conserving and managing the state's forest, fish, and wildlife resources while providing ample opportunities for all citizens to use, enjoy, and learn about them.

"Conservation areas belong to the people of Missouri and are for their benefit. These areas have always provided room for people to enjoy the outdoors," says MDC Director Robert L. Ziehmer. "They also do much more. We manage these areas to reestablish habitats for native species and to protect unique natural communities, which results in a wider range of ways that the public can benefit from these areas."

## DESIGN FOR CONSERVATION

Missourians have long supported conserving lands for public use and to support wildlife. Beginning in the 1970s, the Department made a pledge to embrace a broader conservation approach called the Design for Conservation. It was a plan to preserve the best examples of forests, prairies, marshes, and glades; to obtain land for recreation, forestry, and protection of critical habitat; to

## CONSERVATION AREAS FOR NATURE AND YOU

**M**DC's public land stewardship goals balance the needs of wildlife and people. "The Department has planned and implemented one of the best long-term public land strategies in the nation," says MDC Deputy Director Tim Ripperger.

MDC's public land stewardship goals aim to:

- Provide the land base necessary to assist in the conservation of the state's forest, fish, and wildlife resources.
- Identify, acquire, protect, and manage Missouri's most significant land and water resources for appreciation and use by future generations.
- Preserve Missouri's outdoor heritage through public access.
- Promote hunter and angler recruitment while providing outdoor education opportunities, as well as providing outdoor and resource-related recreation.



Eastern collared lizard

**Glades harbor some of Missouri's most interesting organisms. Nowhere else in the state can you find roadrunners, prickly pear cacti, and collared lizards.**

increase services to the public in the areas of wildlife and forest conservation; and to create a system of conservation nature centers throughout Missouri. Voters approved the Design for Conservation plan in 1976 with a one-eighth of 1 percent sales tax, providing reliable funding for forest, fish, and wildlife conservation.

"This citizen-led initiative created an interconnected and accessible network of public lands that conserve natural resources while providing the public with quality recreational and educational opportunities," says MDC Deputy Director Tim Ripperger.

Prior to Design for Conservation, the Department managed 294,000 acres of public land. During the initial 20 years of implementing the Design, the Department purchased an additional 440,000 acres to serve as conservation areas. These early efforts were based on broad guidelines and willing sellers. While the combined acreage of Missouri's conservation areas is remarkable, it totals less than 3 percent of the state.

Incredibly, almost 8 percent of MDC's public land holdings were donations. "Donations of land are the ultimate expression of the commitment to conservation and to the future that a landowner can make," Ripperger says.





Rock pink flower on Wildcat Glade Natural Area in Joplin

As of 2012, the Department holds approximately 789,000 acres in public trust and manages another 197,000 acres owned by conservation partners, such as the U.S. Army Corps of Engineers, The Nature Conservancy, and others. The Department's emphasis has shifted away from acquiring substantial new acreage and is now focused on improving infrastructure and access to existing conservation areas, as well as ongoing efforts to manage habitat to benefit wildlife. Funding for land acquisition back in 1979–1987 averaged 29 percent of the Department's budget. Today, land acquisition comprises less than 1 percent of the Department's annual budget.

## MANAGING CONSERVATION AREAS FOR WILDLIFE AND PEOPLE

To benefit the greatest number of wildlife species, MDC maintains a high level of active management on conservation lands—especially for quail and grassland birds. In 2011, this included habitat-management activities on nearly 185,000 acres, including 43,000 acres of wetlands; 21,000 acres of woodlands, forests, and savannas; 76,000 acres of croplands (including 12,000 acres of food plots); 24,000 acres of grasslands

**Unfortunately, many glades in Missouri aren't healthy. Land-use practices have destroyed many of Missouri's "mini-deserts," and fire suppression has degraded others. The Department is hard at work on conservation areas and with private landowners to restore glade habitat by removing invasive trees and setting periodic controlled fires.**

and prairies; 20,000 acres of old fields; and 1,000 acres of glades.

"MDC intensely manages a number of conservation areas for increased hunting opportunities for rabbit, squirrel, dove, and quail in an effort to recruit and maintain a strong hunting heritage," says DeeCee Darrow, MDC retired Wildlife Division chief.

The Department continues to rehabilitate five of the state's oldest wetland conservation areas: Fountain Grove, Duck Creek, Montrose, Schell-Osage, and Ted Shanks. Ted Shanks Conservation Area (CA) restoration is complete and future development plans are underway for sections owned by the U.S. Army Corps of Engineers. Work at Fountain Grove CA is nearing completion and initial planning efforts are underway at Montrose



CA. Learn more about Missouri's public wetlands at [mdc.mo.gov/node/4222](http://mdc.mo.gov/node/4222).

The Department manages 440,000 acres of public forestland on conservation areas throughout the state. Last year, MDC completed more than 49,880 acres of active management, including forest inventory, tree planting, timber sales, forest stand improvement, wildlife-management practices, and glade and savanna management.

"The Department also stewards the state's forests by leading statewide wildfire-suppression efforts," says Lisa Allen, Missouri state forester. "MDC foresters work with more than 770 fire departments to offer training, provide fire equipment grants, and promote wildfire-prevention activities."

MDC's conservation area management continues to connect citizens with nature through the recent completion of the following major construction projects: Eminence City Park access; Eagle Bluffs CA office and draw room; Kansas City Regional Office; Central Regional Office; improvements to the Shepherd of the Hills, Lost Valley, and Roaring River hatcheries; Powder Valley Conservation Nature Center; the Jay Henges Shooting Range renovation; and levee work at Ten Mile Pond CA.



**To benefit the greatest number of wildlife species, MDC maintains a high level of active management on conservation lands—especially for quail and grassland birds. In 2011, this included habitat-management activities on nearly 185,000 acres.**



**Prairie blazing star at Pawnee Prairie Natural Area**

The Department also works to improve access to the outdoors in other ways. "More Missourians enjoy the outdoors because of MDC's managed hunts and the construction of disabled-accessible docks, hunting blinds, and trails," says Darrow. "Special hunting and fishing events for people with limited mobility provide additional opportunities for people of all ages to pursue outdoor activities and to learn first-hand about conservation."

## MISSOURI'S CROWN JEWELS

Another way the Department works to steward Missouri's forest, fish, and wildlife resources is by conserving the best remaining examples of Missouri's rich and varied forests, woodlands, savannas, prairies, glades, cliffs, wetlands, caves, springs, streams, and rivers. This effort began in 1970. Today, the state has more than 180 designated natural areas in the Missouri Natural Areas Program, totaling 72,060 acres.

"The success of the Natural Areas program is due to an outstanding conservation partnership between MDC, the Missouri Department of Natural Resources, the Mark Twain National Forest, the Ozark National Scenic Riverways, the U.S. Fish and Wildlife Service, and The Nature Conservancy," says Michael Leahy, MDC natural





## MISSOURI PRAIRIE FOUNDATION: CONSERVING PUBLIC PRAIRIES

**T**allgrass prairie once covered 15 million acres of Missouri—nearly one-third of the state. Today, less than 1 percent remains. Our prairie remnants are stunning in their ecological wealth and complexity—they provide habitat for hundreds of plant species, thousands of invertebrates (including as many as 400 different pollinating insects), and dozens of animals.

The Conservation Department, the Missouri Prairie Foundation, The Nature Conservancy, the Missouri Department of Natural Resources, and other groups own approximately 30,000 acres of original and restorable prairie. These areas are maintained for the public to enjoy and to ensure that prairie is forever a part of Missouri's natural heritage.

The Missouri Prairie Foundation partners with other conservation groups and private landowners to enable the restoration and management of prairie on a larger scale than any one group or individual could accomplish alone. In 1998, the Foundation spearheaded the formation of the Grasslands Coalition—20 conservation groups and private landowners working together to pool resources and make a lasting impact on native grasslands and the animals that live there.

The Foundation works with landowners to improve prairie habitat, share technical knowledge, and leverage funding for restoration work. In one example, the Foundation recently completed a three-year \$70,000 grant from the U.S. Fish and Wildlife Service to restore native prairies and manage grasslands in the Mystic Plains Conservation Opportunity Area in Adair and Sullivan counties. The Foundation partnered with the Department and private landowners to improve more than 2,000 acres by eliminating woody cover, removing fences, resting hay fields, controlling invasive species, and assisting with prescribed fires. This resulted in greater prairie species diversity, expanded open vistas, and created more continuous habitat needed by grassland birds and other wildlife—for less than \$55 an acre.

Join in the fun at the Foundation's annual Prairie BioBlitz, where outdoor enthusiasts can become "weekend citizen scientists" by discovering and documenting plant and animal species on a prairie. This event increases biological knowledge of prairies and generates greater interest in Missouri's native grasslands. Learn more at [moprairie.org](http://moprairie.org).

**To see a shining example of nature in its purest, wildest, best-functioning form, visit a natural area. The Missouri Natural Areas Program—a partnership of the Conservation Department and other agencies—safeguards more than 180 natural areas across the state.**

areas coordinator. "These organizations have come together with the common goal of conserving the natural communities of Missouri for the enjoyment and benefit of today's citizens and future generations."

These habitats support many native plant and animal species. Missouri natural areas provide habitat for more than 350 Missouri species of conservation concern, including endangered species such as the Niangua darter and the western prairie fringed orchid. Designated natural areas also conserve multitudes of species that are not endangered but are uncommon due to habitat loss. In this way, natural areas help to keep species off the endangered species list by ensuring these plants and animals have the habitat they need.

Designated natural areas help connect us to our outdoor heritage. They provide opportunities for many forms of outdoor recreation, including hiking, nature

photography, bird watching, nature study, hunting, and fishing. Learn more about natural areas at [mdc.mo.gov/node/2453](http://mdc.mo.gov/node/2453). Or refer to *Discover Missouri Natural Areas: A Guide to 50 Great Places*, available at MDC conservation nature centers statewide and at [mdcnatureshop.com](http://mdcnatureshop.com).

### MDC PARTNERS WITH COMMUNITIES

In addition to actively managing the state's conservation areas to benefit people and wildlife, MDC also partners with communities to improve access to the outdoors,

especially fishing. Since 1981, the Department's Community Assistance Program has provided close-to-home fishing opportunities throughout the state.

"These programs benefit our partners and the local communities by providing an extremely cost-effective way of providing citizens with more quality fishing and boating opportunities," says Marlyn Miller, the Department's fisheries programs supervisor.

The Department has cooperative agreements with 117 partners to manage 168 public lakes, 42 stream access areas, four lake access areas, and nine aquatic resource education ponds. At 78 of these lakes and streams, MDC

**MDC also offers many managed hunting opportunities for tens of thousands of Missourians. In 2011, the Department offered 88 managed deer and turkey hunts, managed waterfowl drawings, 14 youth hunts, and 12 managed hunts specifically for disabled hunters. Learn more about managed hunts at [mdc.mo.gov/node/3867](http://mdc.mo.gov/node/3867).**

developed or improved motorboat access thanks to the Federal Aid in Sport Fish Restoration Program, which funds up to 75 percent of total project costs.

The Department strives to provide high-quality fishing opportunities for all Missourians, including those living in urban areas. MDC's Urban Fishing Program stocked more than 50 ponds in St. Louis, Kansas City, St. Joseph, Sedalia, and Springfield with trout, channel catfish, and sunfish.

"Department surveys have found that the majority of the anglers at these lakes fish nowhere else," Miller says. "MDC is providing fishing opportunities to people who may not otherwise venture out of the city to fish."

### CONSERVATION AREA STEWARDSHIP CONTINUES

Missouri's rich history of supporting conservation efforts now benefits people and wildlife throughout the state. "The majority of Missourians feel the Department is doing a good or excellent job of providing services to them, their families, the community, and the state," says



Youth dove hunting



## THE NATURE CONSERVANCY

The Nature Conservancy and MDC have a long history of working together, sharing resources and knowledge to help achieve the conservation goals of both organizations.

In the Current River watershed, for example, MDC and the Conservancy team up to implement prescribed fires, which improve native habitat, watershed quality, and reduce the threat of severe wildfires. This watershed is a top priority for both groups, as it provides habitat for a vast array of native species and supports local economies through the timber and tourism industries.

This partnership has also created an “outdoor laboratory” along the Current River at the Conservancy’s Chilton Creek Preserve, where a long-term research and land management collaboration is assessing the effects of fire and other practices in woodland restoration. This research provides valuable information for conservation groups and other landowners.

“The cooperation and coordination between The Nature Conservancy and MDC also allowed for a significant expansion of the Sunklands

Natural Area, which features the longest sinkhole in Missouri, unusual sinkhole pond marshes, remnant shortleaf pine woodlands, and over a dozen rare species of plants and animals,” says Michael Leahy, MDC natural areas coordinator.

The vast majority of land in the Ozarks is privately owned. In some instances, however, MDC and the Conservancy partner to acquire unique habitats that are managed as public land for the benefit of both nature and people—such as the 83,000 acres obtained in 1991 from the Kerr-McGee Corporation.

“For nearly half a century, the Conservancy and MDC have partnered to the benefit of Missouri’s forest resources,” says Todd Sampsell, Missouri state director for the Conservancy. “Missourians are fortunate to have an abundance of healthy, productive forests, and we value MDC’s expertise and commitment to sustaining this natural heritage for future generations.”

MDC and the Conservancy also work with private landowners to help keep their lands economically productive, while at the same time providing conservation benefits such as watershed protection or improving natural habitat. Along the Meramec River, the two organizations assisted rancher Susan Wallach with the installation of a crossing over a Mera-



**The Nature Conservancy and MDC team up to implement prescribed fires, which improve native habitat.**

me River tributary. The crossing connected Susan’s pastures, allowing cattle, trucks, and farm equipment to cross the stream safely. The crossing also prevented sediment and nutrients from entering the Meramec.

“As a people, we all depend on healthy natural systems to sustain our economy and quality of life,” says Doug Ladd, the Conservancy’s director of conservation science. “To conserve these resources for the benefit of present and future generations, our society must weave conservation into the fabric of everyday life, building on partnerships such as the one between MDC and the Conservancy.”

Learn more at [nature.org](http://nature.org).

David Thorne, MDC policy supervisor. “According to recent surveys, 91 percent of Missourians agree that it is important for outdoor places to be protected, even if you don’t plan to visit the area. And 75 percent of Missourians agree that land should be acquired for forest, fish, and wildlife conservation.”

MDC is committed to ensuring that Missouri’s public land stewardship continues to balance the needs of people and wildlife. “By focusing on partnerships and being adaptable, we can continue to build upon Missouri’s quality land conservation history and boldly advance the Department’s land conservation and stewardship,” Ripperger says.

Together with Missourians, MDC will continue a land-conservation heritage that will protect key natural resources, continue to improve access and opportunities for people to enjoy these areas, continue to support our outdoor heritage, and provide educational opportunities for future generations of Missourians. □

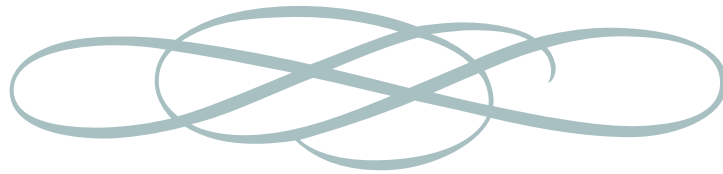


**Missouri’s public lands and nature centers, such as Powder Valley Conservation Nature Center near St. Louis, provide room for people to enjoy the outdoors.**





# Healthy Forests for Generations





**E**ASTER SUNDAY, 1941, WAS A day the fate of Missouri's forests seemed to glow red hot. Smoke hung heavy in the air. Much of the Ozarks was ablaze. Yet Missourians were determined to forge an entirely different fate for the forests of the state.

Since that Easter Sunday, generations of Missourians have worked with backfires, shovels, and education to curb the tradition of burning forestland. Missourians have restored healthy forests and created a sustainable timber industry that embraces wise use of Missouri's forests.

Today, millions of acres of healthy forests once again blanket more than a third of our state. And in just the past 20 years, Missouri has actually gained 1.4 million acres of forest.

## FROM ABUNDANCE TO ASHES

In the 1800s, forests covered 70 percent of the state. Explorers wrote of the dark swamps of the Bootheel, the park-like pine forests of the Ozarks, the balds of southwest Missouri, and the mix of prairie and forest in northern and western Missouri. Early settlers found a landscape rich with the essentials of frontier life—wood, water, and wildlife.

Then things began to change. By the late 1800s, lumber mills sprang up to feed a country hungry for wood products. Western trains ran on Ozark pine—3,500



**For more than 20 years, Grandin Mill flourished and was the largest lumber mill in the nation. By 1910, the forests around Grandin were gone, forcing the company to move its headquarters to Eminence, where operations continued until 1919.**

ties per mile. In 1912 alone, 15 million railroad ties headed west, and Ozark lumber shipped east to build a growing nation.

Within a short time span, the boom of Ozark timber went bust. The rolling Ozark hills that had afforded early settlers with all of their basic needs could no longer provide for people or wildlife. By the 1930s, only about 2,000 deer were thought to exist in the state. Turkeys declined

## COMMUNITY FORESTS

**T**he trees in our communities are valued for their economic, social, and environmental benefits. Because the urban environment is hard on trees, urban foresters use specialized techniques to maintain our community forests.

“MDC’s TRIM grants, in cooperation with the Missouri Community Forestry Council, provide up to \$10,000 for community tree inventories, removal or pruning of trees, tree planting, and educational programs,” says Nick Kuhn, MDC community forestry coordina-

tor. “This helps communities provide safe and healthy trees, while the trees work for all of us by cleaning the air, and improving the soil and water.”

This program assists agencies, public schools, and nonprofit groups with the improvement of trees on public lands. In 2011, the Department awarded more than \$306,000 to several dozen Missouri communities and schools throughout the state.

“The TRIM grants have allowed the City of Columbia to extend our resources and develop greater projects. MDC’s TRIM grants also show our city leaders the importance of wisely managing our community forests,”

says Brett O’Brien, Columbia parks and recreation natural resource supervisor.

With help from MDC, communities, college campuses, and electric providers all over the state participate in wise tree care by being a part of the Arbor Day Foundation programs known as Tree City USA, Tree Line, and Tree Campus. These programs foster tree plantings as well as best practices for tree care. Missouri has 81 cities, 11 electric utilities, and three colleges recognized by the Arbor Day Foundation for helping trees where 3.7 million Missouri residents live.

Learn more about MDC’s Community Forestry Programs at [mdc.mo.gov/node/8695](http://mdc.mo.gov/node/8695).





to a few thousand birds in scattered flocks. For all practical purposes, bear and ruffed grouse were gone, and most other species were in dire straits.

### MDC'S ROOTS IN FORESTRY RUN DEEP

In November 1936, Missourians came together to pass a state constitutional amendment to create an apolitical Conservation Commission to restore and conserve Missouri's fish, wildlife, *and forests*. This was a progressive concept for its time.

"Their foresight is one thing that makes Missouri's conservation model so unique," says John Tuttle, MDC Forestry Division unit chief.

Missouri's vision came about largely due to the efforts of early conservation leaders E. Sydney Stephens and J. T. Montgomery, who believed good forest management was essential for wildlife.

When the Conservation Commission began on July 1, 1937, the Commission appointed I. T. Bode, a forester, as the first director of the Conservation Department. Bode understood the importance of partnering with landowners for forestry conservation success.

**Most western trains ran on Ozark pine, and every mile of track required 3,500 ties. In 1912 alone, 15 million hand-hewn railroad ties were sold in Missouri. Within a short time span, the boom of Ozark timber went bust, and the rolling Ozark hills could no longer provide for people or wildlife.**

In 1938, forester George White came to Missouri by way of the U.S. Forest Service. He believed the keys to healthy forests were fire suppression, education, and protection. He directed the Department to purchase cut-over forestland to serve as a model for forest management, and to create a state forest nursery to supply trees for reforestation. He knew landowners who planted trees would be less likely to allow their land to burn. Lastly, White sought to make foresters available to landowners to help them manage their own wooded acres.

The tasks ahead were daunting. Some foresters deemed Missouri's human-caused forest fires too big a problem to contain. Burning forests was a tradition dating back to early settlers. Once the trees were gone, soil



eroded quickly, choking the creeks and the fish in them and rendering the landscape unable to support crops.

“Starting in 1937, fire suppression was job number one for the newly created Conservation Department. Everything else came later,” says Gene Brunk, retired MDC Forestry Division unit chief.

Stories tell of early foresters following their noses to find smoke “thicker than usual.” Soon, steel and wood-braced fire towers dotted the landscape. To a readership well connected by phones and good roads, it is difficult to appreciate the challenges surmounted by early fire tower watchmen. There was an age before effective radio communication. Some towermen even resorted to sending postcards to other fire districts to alert them of distant smoke.

Volunteers and community support were vital to early firefighting success, and they still are today. Of course, the

**Fighting forest fires was job number one for the newly created Conservation Department. Volunteers were, and continue to be, important partners in controlling fire.**

best way to stop a fire is to keep it from starting. When the harried foresters weren’t battling fires, they talked to anyone who would listen about forest fire prevention, forest management, and conservation.

Slowly things began to change. White led the Department’s forestry efforts for 22 years, becoming the longest-tenured state forester. By the time he retired, his vision had grown into one of the most respected state forestry programs in the country.

White’s keys to healthy forests still resonate in modern forest management. “The keys to healthy forests remain sound forest management, education, and protection from land conversion practices,” Tuttle says.

“Tremendous progress in Missouri’s forest management has been made in the last 75 years, with MDC leading the way,” Tuttle says. “The once impossible task of fire control in the Ozarks is a reality. Deer and turkey are found in record numbers. Restoration programs have supported many native species of fish and wildlife. And once again, Missouri is a leader in wood products.”

Fire management today is the best it has ever been. MDC’s Rural Fire Protection program remains one of





## THE SHOWBOAT

When the Missouri Department of Conservation formed in 1937, burning forests in the rural Ozarks was a land management tradition dating back to the early settlers. To improve forests and wildlife, the young agency created a new way to spread public information on conservation: the Forestry Division's Showboat. Vehicles such as this 1946 Chevrolet paneled delivery truck were equipped with a portable generator and a movie projector. The Showboat visited rural schools throughout the Ozarks, showing movies about fire prevention and conservation and handing out free popcorn. For many, these were the first films they had ever seen, since electricity had yet to make it to many areas. The Showboat operated from the late 1930s to the early 1950s. One is on display today at the Twin Pines Conservation Education Center in Winona.



the Department's most effective statewide programs. It began in the mid-1960s to organize, equip, and train rural fire departments. MDC foresters also provided on-site training for fire suppression. This program has protected nature, lives, and property.

To date, MDC has provided 776 fire departments with firefighting equipment valued at more than \$58 million and firefighting grants totaling more than \$3.8 million. MDC's fire prevention efforts also include helping communities and homeowners to adopt federal Firewise principles to greatly reduce the chances of fire damage.

Well-planned prescribed fires continue to be a useful management tool to mimic natural processes and effectively manage large areas. Prescribed fire on a landscape scale increases habitat diversity for all woods and prairie.



**MDC forester Art Suchland, left, discusses timber sales with landowner Dean Klohr. To learn more about forest management for landowners, visit [mdc.mo.gov/node/3352](http://mdc.mo.gov/node/3352).**

Prescribed fires encourage native species, increase wildlife food supplies, and reduce wildfire potential.

### MDC WORKS WITH YOU TO SUSTAIN HEALTHY FORESTS

Partnerships are vital to ensure healthy forests. MDC, the U.S. Forest Service, and landowners work together to improve Missouri's forests for wildlife, recreation, timber, and watershed protection. MDC's state land program manages more than 400,000 acres of public forestland. But those acres are just a fraction of Missouri's total forests.

"Landowners own 83 percent of the state's forest, and what happens on private forest lands has a major effect on the state's forest health," Tuttle says. "Private landowners are the key to forest conservation."

To that end, the Missouri Forest Action Plan was developed—a strategy for sustaining Missouri's forests and the benefits and services we expect from them.

"The plan serves as a call to action. While Missouri's forests are increasingly threatened, they offer tremendous potential to help with many of our most pressing social and environmental challenges," says Lisa Allen, state forester and Forestry Division chief.

MDC works with landowners on long-term stewardship of their property, which can span multiple generations. Most landowners realize that forest management is an investment in the future and want to leave their land better than they received it.

"If managed wisely, a healthy forest will keep producing quality trees for years to come, creating tremendous economic, environmental, and social benefits," says Mike Hoffmann, MDC Forestry Division unit chief.

Department foresters can advise landowners on all phases of forest management such as tree planting, thin-





ning, and harvesting along with wildlife habitat development and pest control. In addition, the Conservation Reserve Program and other federal programs have encouraged more landowners to reforest open land for erosion control, wildlife habitat, and future timber supply.

## THREATS

Although forest management helps to conserve this valuable resource, our trees and forests face threats from many fronts. Invasive insects, plants, and diseases threaten the health of our forests. Our forests can also be damaged by extreme weather events such as ice, windstorms, droughts, and floods.

“Forests have always faced challenges, from uncontrolled fires, oak decline, chestnut blight, and Dutch elm disease to our present-day challenges with gypsy moths, emerald ash borers, urban sprawl, and thousand cankers disease,” says Nick Kuhn, MDC community forestry coordinator. “We must be ready for future challenges. When our forests are healthy, they are better equipped to deal with new challenges.”

## HEALTH, WEALTH, AND HAPPINESS

Trees and forests are Missouri’s greatest renewable natural resource. “Healthy forests provide clean air and water, habitat for hundreds of species, and even con-

### Stegall Mountain in Peck Ranch Conservation Area

servation areas to be enjoyed by all Missourians,” Kuhn says. “No matter where we live—in the country, suburbs, or cities—trees and forests are vital to our health, wealth, and happiness.”

Through wise-use forest management practices, Missouri is once again a leader in wood production. Railroad ties and lumber are still important products, but the wood industry has become much more diversified. Missouri is a national leader in the production of charcoal, barrels, walnut nutmeats and shell products, and red-cedar gift items. In 2011, Missouri’s forest industry supported 41,200 jobs, contributed \$7.3 billion to Missouri’s economy, and generated \$77 million in state sales tax.

But timber is far from the only benefit of the forest. Our forests provide habitat for an incredible diversity of plants and animals. Because forest ecosystems are very complex, good forest management and good wildlife management are closely linked. Missouri is home to about 730 species of wildlife, many of which live in the forest during a part of their life. Animals ranging from the white-tailed deer and wild turkey to the rare Ozark zigzag salamander are all found in Missouri’s forests. The



## YOU CAN HELP MISSOURI'S FORESTS

MDC partners with numerous organizations to ensure that Missourians can contribute to Missouri's healthy forests.

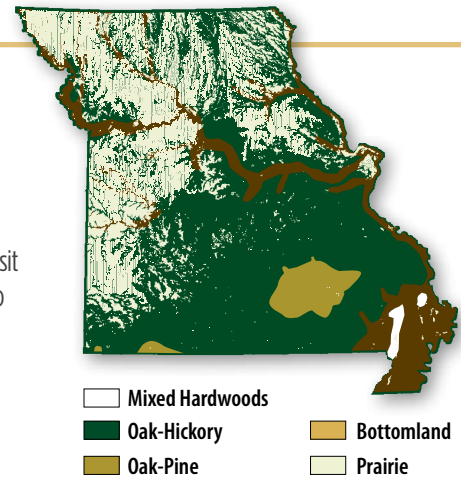
As part of the Missouri Forestkeepers Network, more than 2,000 Missourians protect and enhance forests through monitoring, advocacy, and education activities. Learn more at [forestkeepers.org](http://forestkeepers.org) or call 1-888-473-5323.

Missouri Forestkeepers Network is administered by Forest Releaf of Missouri, a nonprofit organization that provides thousands of trees for

public and nonprofit plantings throughout the state. Visit [moreleaf.org](http://moreleaf.org) or call 1-888-473-5323.

MDC also partners with the Missouri Community Forestry Council to conserve, protect, expand, and improve our community forests. Visit [mocommunitytrees.org](http://mocommunitytrees.org) to learn about how to help the trees where you live.

The Forest and Woodland Association of Missouri serves to connect Missouri's 360,000 private woodland landowners with resources to more productively manage their forests, as well as to act as a statewide advocacy group. Visit [forestandwoodland.org](http://forestandwoodland.org) to learn more.



**Approximately one-third of Missouri is now covered by forests.**

pileated woodpecker, ovenbird, black-and-white warbler, and screech owl are just a few of the many birds that inhabit the forest. Each bird or animal has a specific place and role, or niche, within the forest ecosystem. The more niches that can be created within a forest, the greater the number of species it can support.

To support a diversity of wildlife species, today's forest management and timber harvest practices need to be diverse. Correctly locating logging roads to protect Missouri's streams is just one example. Leaving older trees for cavity-nesting species, cultivating acorn-producing trees as a food source, and creating young stands of trees for food and cover are other examples. The aim is for a balance of habitat types to support all species over the long term.

### MISSOURI'S LARGEST OUTDOOR CLASSROOM

Forests are long-lived, and management decisions can have lasting impacts. With this in mind, MDC established the Missouri Ozark Forest Ecosystem Project (MOFEP) in 1990. This 100-year project studies the impacts of various forest management practices not only on the health of the forest but also on plants and animals.

Forest and wildlife scientists are learning more about the impacts of forest management practices and harvesting techniques in Missouri thanks to this important study. This will help foresters, wildlife biologists, and forest landowners make better-informed management decisions to ensure healthy forests and wildlife well into the future.

### MISSOURIANS CARE ABOUT CONSERVING FORESTS

Missourians have achieved some amazing results in conserving Missouri's forests. Together, we have transformed forestry into a sustainable industry that



**The George O. White Nursery offers a variety of low-cost seedlings for reforestation, windbreaks, and erosion control, as well as wildlife food and cover. Located in Texas County, the nursery annually grows and distributes approximately 3.5 million seedlings of 70 species of trees, shrubs, and prairie forbs. Learn more at [mdc.mo.gov/node/3986](http://mdc.mo.gov/node/3986).**

now grows more trees than it harvests. We restored and conserved dozens of fish and wildlife species and ensured that Missouri is a great place to hunt and fish. We created a system devoted to serving both rural and urban landowners and established accessible public lands and facilities throughout the state. MDC works with citizens to sustain healthy forests for the benefit of people and wildlife—a job that began in the face of flames and was hard won. □





MSR/ethel



# The Lure of Fishing



**G**REAT FISHING IS AT THE heart of enjoying Missouri's outdoors. From farm ponds, streams, and lakes to the nation's largest rivers, Missouri offers an abundance of sport-fishing opportunities to connect anglers with the thrill of a lifetime.

Since the Department was established in 1937, it has led efforts to ensure that the legacy of great fishing in the Show-Me State will only get better. Enhancing Missouri's sport fishing takes many forms: hatcheries and stocking, broad partnerships for habitat-improvement projects, refining fishing regulations, watershed conservation, and improving fisheries and fishing access through federal programs.

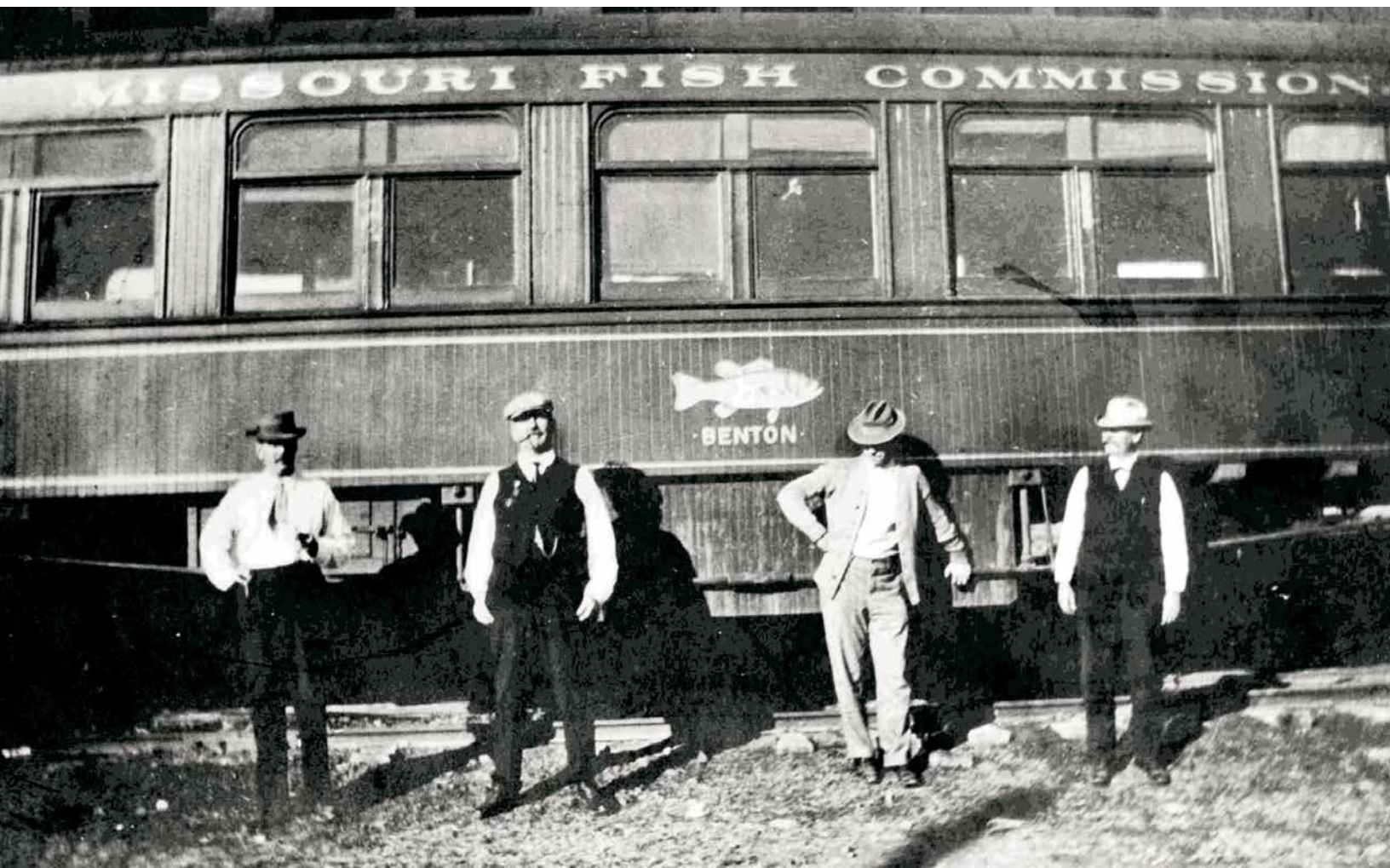
### HATCHERIES AND STOCKING

In 1878, the Missouri Legislature authorized Missouri's first Fish Commission, which began the state's restock-

ing efforts. The early Fish Commission's greatest achievement was to begin the development of a fish-hatchery system that is still important today.

"Back then, fisheries workers would stop a train at a river crossing and pour fish out of milk cans to stock the local streams," says Chris Vitello, MDC Fisheries Division chief. "At that time, restocking was the only tool in the toolbox. But it was soon apparent that improvements needed to be made to regulations and to the stream itself to support those fish and to allow them to thrive."

Today's hatcheries and stocking efforts continue to be a major focus of the Department. MDC's hatcheries produce almost 9 million fish each year, including largemouth bass, bluegill, channel catfish, walleye, sturgeon, hybrid striped bass, paddlefish, and both rainbow and brown trout. The Department's hatchery system includes four warm-water and five cold-water hatcheries. MDC's warm-water hatcheries produce enough fish to meet stocking needs in Missouri and also provide fish for occasional trades with other states. The Department's cold-water hatcheries produce





## TROUT UNLIMITED

**T**ROUT Unlimited has been a key partner in conservation since the 1970s. Trout Unlimited is a national organization with about 400 chapters, totaling 140,000 members. More than 1,900 members in three Missouri chapters work to enhance trout fishing and cold-water habitat throughout the state.

“Trout Unlimited was one of the stakeholder groups the Department worked with to create a trout-fishing management plan,” says Mike Kruse, MDC Resource Science Division chief and past Department trout plan coordinator. “Trout Unlimited has played a key role in helping to implement that plan, particularly in leading a group of partners that pooled their resources to make some important land acquisitions along our trout streams possible. Those partners included the Ozark Fly Fishers and fishing clubs affiliated with the Federation of Fly Fishers

and the Missouri Trout Fishermen’s Association. The contributions of these groups really make Missouri trout fishing what it is today.”

Trout Unlimited, along with help from other organizations and individuals dedicated to trout fishing, helped MDC create winter trout fishing opportunities in lakes near Missouri’s urban centers, established a cold-water conservation fund with the Missouri Conservation Heritage Foundation dedicated to conserving key cold-water habitats, and improved access to Missouri’s trout streams, such as Mill Creek, Little Piney Creek, Capps Creek, Current River, North Fork of the White River, and Lake Taneycomo.

“Currently, the Mid-Missouri chapter of Trout Unlimited is working with MDC to provide wader wash stations to help reduce the invasive spread of didymo (rock snot) found just south of Missouri,” says Michael Riley, president of the Mid-Missouri chapter.



**Anglers gather for trout opening day at Bennett Spring State Park.**

Missouri’s Trout Unlimited members also have helped to create disabled-accessible fishing accesses and to promote trout fishing with numerous fishing programs and events. Learn more at [tu.org](http://tu.org).

millions of trout to stock four trout parks, Lake Taneycomo, and selected cold-water streams designated as trout waters.

Over the past decade, MDC’s hatcheries have undergone extensive renovations to improve the Department’s ability to raise a variety of warm- and cold-water fish species. These improvements ensure that

MDC will continue to efficiently produce the millions of sport fish needed for stocking. MDC hatcheries also participate in research and breeding of rare or threatened species, such as Topeka shiners and Ozark hellbenders, further benefiting the aquatic resources of the state.

## PARTNERS IN HABITAT IMPROVEMENT

Public input and involvement are both essential for improving the state’s fisheries. MDC works with anglers, communities, and fishing groups, as the Department develops management plans for each unique sport fish. Citizen input has been instrumental in many management plans to allow fish populations to be maintained naturally and to allow anglers to catch more and bigger fish.

MDC works with many groups to sustain healthy fisheries throughout the state. “Good fishing requires good water quality, and that depends on conserving the land around it,” says Andrew Branson, a fisheries programs specialist for the Department. “Preventing erosion and conserving habitat along streams is also good for the streams themselves. Many groups working together for conservation can make that happen.”

Some of MDC’s partners include private landowners, the Conservation Federation of Missouri, Missouri Cooperative Fish and Wildlife Research Unit, Missouri Department of Natural Resources, National Park Service, U.S. Army Corps of Engineers, U.S. Forest Service, and



**LEFT: The Missouri Fish Commission’s greatest achievement was to begin the development of a fish hatchery system that is still a major focus of MDC today.**

**ABOVE: A MDC hatchery worker feeds trout at the Shepherd of the Hills Fish Hatchery on Lake Taneycomo.**



**Since it was founded in 1937, MDC has sponsored thousands of fishing clinics for young anglers.**

the U.S. Fish and Wildlife Service. Many cities, towns, and corporations also partner with MDC to improve fishing and fishing access through MDC's Community Assistance Program and the closely related Corporate and Agency Partnership Program.

The Department is also working with Bass Pro Shops and the National Fish and Wildlife Foundation to improve fish habitat in Table Rock Lake and Lake Taneycomo through the National Fish Habitat Initiative. This partnership has improved habitat by adding brush piles, stumps, and rock structures to the reservoirs using a specially made pontoon barge (see *Missouri Conservationist*, November 2011). The initiative will also improve water quality by reducing inputs from failing septic systems and stabilizing stream banks in the Table Rock Lake watershed. Similar efforts are ongoing in other parts of the state through the National Fish Habitat Partnership.

The efforts of many volunteer groups continue to benefit the waterways of the state, including Stream Teams, angling groups, such as Missouri Smallmouth Alliance and Muskies, Inc., and local nonprofits, such as the Watershed Committee of the Ozarks and the



James River Basin Partnership. In 2011, more than 4,000 Stream Teams donated 146,000 hours in stream-improvement projects.

## FISHING REGULATIONS AND SPORT-FISH MANAGEMENT

Monitoring fish populations and subsequently adjusting limits and seasons are important aspects of sport-fish management. For example, groundbreaking research conducted by MDC in the 1980s found that crappie populations in many of Missouri's large reservoirs were being overfished. Higher quality and more consistent crappie fishing resulted from setting minimum length limits and reducing the daily limit from 30 to 15 in appropriate lakes.

MDC improved bass fishing by creating stream black bass special management areas. Beginning in 1989,

## REGULATIONS ARE TAILOR-MADE FOR INDIVIDUAL FISHERIES

Each pond, stream, river, and reservoir is unique and often requires specific regulations in order to best manage its fish populations. Fishing regulations are based upon data collected from fish sampling, creel surveys, and public input.

Before heading out, review the fishing regulations for your destination. The time you invest will help protect the fisheries and keep you from violating the *Wildlife Code*. Pick up *A Summary of Missouri Fishing Regulations* at permit vendors or review fishing regulations online at [mdc.mo.gov/node/3104](http://mdc.mo.gov/node/3104).





## FIRST IN SCIENCE

Since it was established in 1937, the Department has been a national leader in science-based fisheries management. Many fisheries-management techniques, now widely adopted throughout the country, were developed by the Department.

- Artificially hatched channel catfish eggs (1939).
- Developed device to measure fish growth by measuring scale growth rings (1951).
- Developed pelleted trout feed (1956).
- Discovered paddlefish eggs and larvae in upper Osage River (1960).
- Hatched paddlefish eggs at Bennett Spring Hatchery (1961).
- Pioneered bass, crappie, and trout harvest management techniques (1970s–1980s).
- Reared and released endangered pallid sturgeons in the big rivers (1994).
- Reared and released endangered Niangua darters in the Osage River basin (1996).
- Established red, white, and blue trout management areas (2003).
- Propagated and released federally endangered Ozark hellbenders (2008).
- Propagated and released federally endangered Topeka shiners (2011).
- Collaborated with the St. Louis Zoo to spawn and rear in captivity federally endangered Ozark hellbenders (2011).

**Due to MDC's pioneering of egg collection and successful rearing and stocking programs, paddlefish provide an exciting fishing opportunity. Department staff stock thousands of paddlefish fingerlings each year to support popular snag fisheries throughout the state.**

MDC fishery managers and researchers began to evaluate the impacts of special fishing regulations on stream black bass. Surveys showed that special regulations helped anglers catch more and larger smallmouth bass in selected waters.

Today, these stream black bass special management areas total 2,091 miles of water. To determine bass harvests, MDC conducted a statewide smallmouth bass angler opinion survey, performed smallmouth bass radio telemetry movement studies, and studied angler harvest rates on five streams. The results will be used to better understand and manage Missouri's smallmouth bass.

Since the 1990s, MDC has also enhanced and diversified walleye-angling opportunities across the state. Hatcheries increased production of fingerling walleye, and stocking expanded. Reward-tagging studies show

these stockings were successful and that walleye are growing to harvestable size (15 inches) in two years. Every year, up to 25 percent of these tagged, legal-size fish are harvested, reflecting the rising popularity of walleye fishing.

In 2010, MDC held a series of public meetings to gather input as part of a blue catfish management and evaluation project for Truman Lake and Lake of the Ozarks. Fisheries staff continue to monitor the status of blue catfish populations in Missouri's big reservoirs to ensure that these large fish are abundant for future generations to enjoy.

On the Missouri River, the Department stopped commercial harvest of catfish in 1992. Since then, sport anglers have taken many catfish in the 80- to 100-pound range. Our stretch of Missouri River is now among the nation's top trophy catfish waters.

"Having two state-record catfish caught in 2010 proves the wisdom of past management decisions," says Vitello. "The Missouri River is one of several fisheries in the state with the potential to produce huge catfish. Given a chance to grow, blue and flathead cats can reach sizes that make even the most experienced angler's heart race."



**MDC's new fishing app for smart phones shows you a map of Missouri with the locations of public boat ramps to the major lakes, rivers, and streams. The map also shows you the exact location of underwater fish structures put in place by MDC.**

Fishing also should continue to get better on the Missouri and Mississippi rivers as state and federal agencies work together to minimize habitat loss and to improve fisheries habitat. MDC biologists have completed population evaluations on flathead catfish and sauger to help determine appropriate harvest regulations for improving these important big-river fisheries.

Also known as the “fish of 10,000 casts,” muskie remain one of Missouri’s most elusive sport fish. MDC stocks muskies at Fellows Lake, Hazel Creek Lake, Pomme de Terre Lake, and August A. Busch Memorial Conservation Area. In 2009, anglers reported catching a 36-inch or longer muskie for every 25 hours of effort—a big reward for perseverance. Recently, the first Missouri muskie to break the 50-inch threshold was caught by



MDC fisheries biologists at Fellows Lake—proving that muskies are well suited for selected reservoirs in the Show-Me State.

The Department also has enhanced trout angling. With input from a number of trout-fishing organizations and citizens, the Conservation Commission approved *A Plan for Missouri Trout Fishing* in 2003. This plan, as well as other trout studies and scientifically based stocking, have greatly expanded the quantity and quality of trout fishing in Missouri.

## BUYING FISHING LICENSES, RODS, AND REELS PUTS FISH IN THE WATER

If you've ever purchased hunting or fishing licenses, fishing lures, rods and reels, or ever fueled up your boat, you're part of one of the most successful efforts to conserve sport fish in America.

Through the U.S. Fish and Wildlife Service's Sport Fish Restoration Program, MDC receives federal excise taxes paid by sportsmen and anglers in the state on fishing tackle, motorboat fuel, electric outboard motors, and sonar equipment. These funds are returned to MDC to conserve, manage, and enhance fisheries, to develop motorboat accesses, and to help fund angler and aquatic-resource education. Since 1952, Missouri has received about \$135 million from the Sport Fish Restoration Program.

For more than 75 years, Missourians also have helped improve Missouri's fishing by buying fishing licenses, which fund fisheries conservation work. And in the end, every Missourian is a partner in conservation, thanks to the conservation sales tax, which allocates 1 penny for conservation efforts from every \$8 of taxable items purchased. This dedicated sales tax provides consistent funding for the long-term efforts required for the conservation of forests, fish, and wildlife.





Muskie

Missouri offers anglers an incredible diversity of waters, teeming with more than 200 species of fish. Each year, more than one million anglers fish Missouri's waters, each spending an average of 15 days afield.

Today, Missouri's trout-fishing opportunities include four trout parks: Montauk, Roaring River, and Bennett and Maramec springs. The Department also manages 120 miles of spring-fed, cold-water trout streams, Lake Taneycomo, and winter trout areas in Columbia, Kirksville, Jackson, Jefferson City, Kansas City, Mexico, Sedalia, St. Joseph, and St. Louis. Nearly 2 million trout, produced by Department hatcheries and the Neosho National Fish Hatchery, are stocked each year. Learn more about these trout areas at [mdc.mo.gov/node/5603](http://mdc.mo.gov/node/5603).

## WATERSHED CONSERVATION BENEFITS SPORT FISH

MDC's sport-fish management continues in the same tradition as it began—with the Department working with Missourians and for Missourians to ensure that the state's diverse fisheries only get better. More than 75 years ago, those early conservation efforts involved milk cans and determination—the only tools in the toolbox. Today, state-of-the-art hatcheries, solid science, public

## REELING IN THE RECORDS

Download the complete list of Missouri state-record fish at [mdc.mo.gov/node/6103](http://mdc.mo.gov/node/6103).

MDC's Master Angler Program recognizes notable catches that fall short of records. Download an entry form with qualifying lengths and weights at [mdc.mo.gov/node/6039](http://mdc.mo.gov/node/6039).

It's hard to beat the excitement of catching your first fish. Commemorate this milestone with MDC's First Fish Certificates. Fill in, print, and frame the full-color certificate, available at [mdc.mo.gov/node/17964](http://mdc.mo.gov/node/17964).

### Some of Missouri's World Record Fish

**BLACK CRAPPIE** • 5 lbs.

*John Horstman at a private pond on April 21, 2006*

**GREEN SUNFISH** • 2 lbs. 2 oz.

*Paul Dilley at Stockton Lake on June 18, 1971*

**SHORTNOSE GAR** • 8 lbs. 3 oz.

*George Pittman, Sr., at Lake Contrary on Oct. 12, 2010*

**YELLOW BULLHEAD** • 6 lbs. 6 oz.

*John Irvin at Old Drexel Lake on May 27, 2006*

### Notable State Records

**BLUE CATFISH** • 130 lbs.

*Greg Bernal by pole and line on the Missouri River on July 20, 2010 (a former world record)*

**FLATHEAD CATFISH** • 99 lbs.

*Robert Davidson by bank pole on the Missouri River on July 23, 2010*

**PADDLEFISH** • 139 lbs. 4 oz.

*George Russell by snagging at Table Rock Lake on March 15, 2002*

**STRIPED BASS** • 60 lbs. 9 oz.

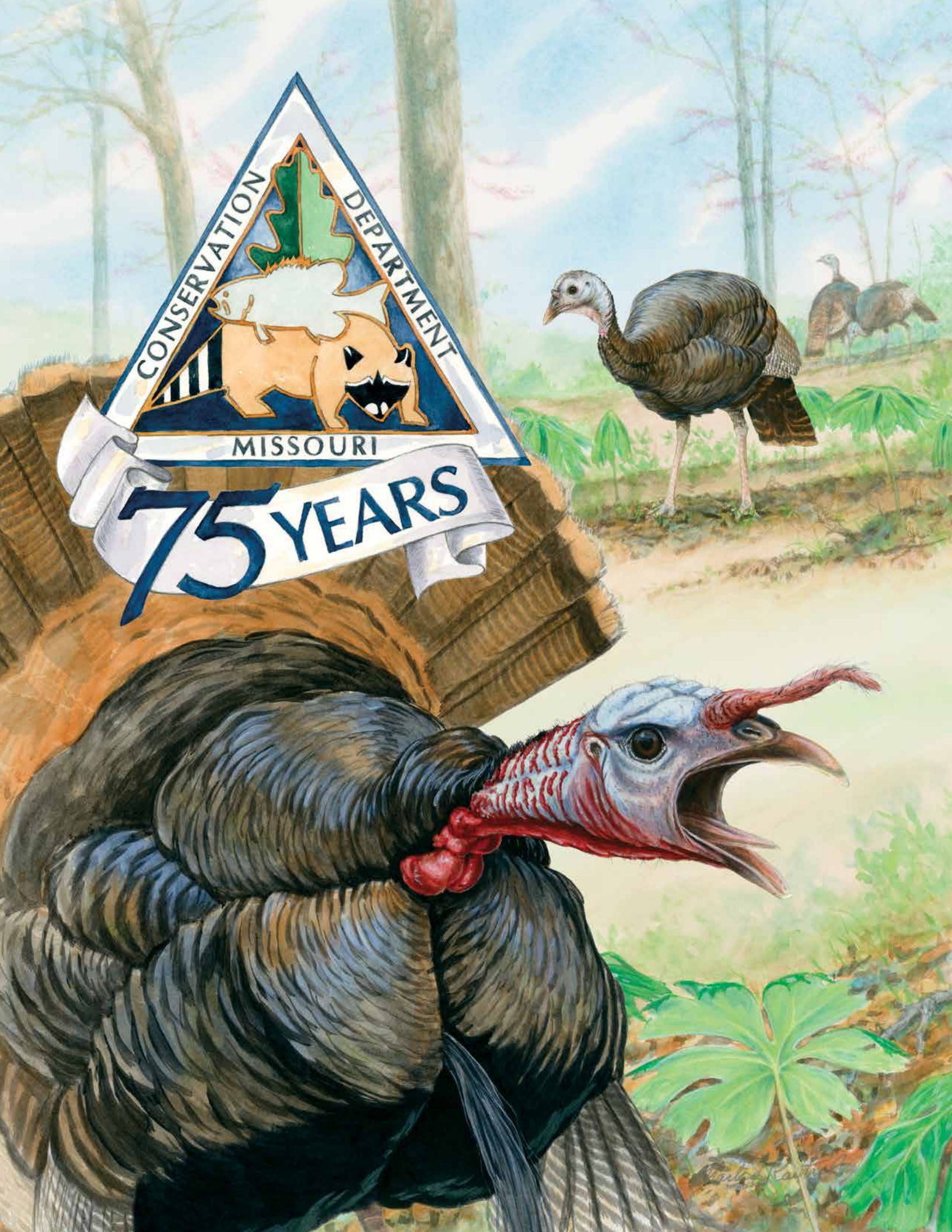
*James Cunningham by pole and line at Bull Shoals Lake on June 18, 2011*

involvement, and broad partnerships continue to improve Missouri's world-class fishing.

"Science-based research is allowing us to learn more than ever before about the impacts of all sorts of things on Missouri's sport fish," says Vitello. "You can't have quality smallmouth bass, for example, if the crayfish (their favorite food) don't thrive. You can't have healthy sport fish if the prey fish that support them, like shad, can't make it. By studying the whole system, we learn more about what supports the entire web of life."

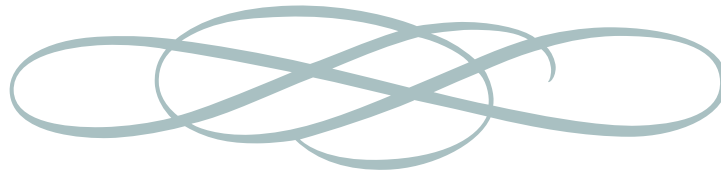
MDC's fisheries biologists continue to connect the dots between sport-fish management and watershed conservation. What is good for the land and the stream ultimately is good for Missouri's most sought-after fish. □







# Bringing Back Wildlife



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ODAY, MISSOURI IS AGAIN HOME TO ABUNDANT and diverse wildlife. Some animals benefited from early restocking efforts, better regulations, and vigilant enforcement. Others rebounded thanks to habitat improvements, conservation partnerships, and education and outreach efforts. And all wildlife benefited from the unwavering involvement and support of Missourians every step of the way.

### RALLY TO CONSERVE DWINDLING WILDLIFE

Early settlers found wild turkey, prairie chickens, deer, and elk in numbers beyond counting. “The early perception was

**Wildlife can’t survive without food, cover, and water. MDC started a pond-building program after withering droughts in 1934 and 1936, and within a decade more than 50,000 ponds soon dotted Missouri’s countryside.**

that wildlife was incredibly abundant—it was an item in the pantry,” says Conservation Commissioner Don Johnson. “Clearly those early settlers thought that the wildlife of the state was inexhaustible and limitless, and probably assumed it would be that way forever. Well, it wasn’t.”

Determined to create a brighter future for the state’s wildlife, Missouri’s sportsmen and concerned citizens came together to lay the groundwork for a new science-based conservation department. On Nov. 3, 1936, voters approved the measure by the largest margin of any amendment to the state constitution. This amendment gave Missouri the world’s first apolitical conservation department, governed by four citizen conservation commissioners. Their charge: to protect and manage Missouri’s forest, fish, and wildlife resources.

The newly created Conservation Commission implemented an entirely different approach to forest, fish, and wildlife management. Public desire replaced political pressure and biological data replaced personal opinion





## NATIONAL WILD TURKEY FEDERATION

The National Wild Turkey Federation plays an important role in the conservation of Missouri's wild turkey population, and it helps Missouri remain one of the nation's top wild turkey states. Missouri has 116 Federation chapters, totaling more than 13,300 members. Approximately half of the proceeds of their chapter fundraisers support the Department's priority upland habitat projects.

"The Federation has been a tremendous partner in conservation here in Missouri," says MDC Deputy Director Tom Draper. "Not only have they been responsible for a great deal of on-the-ground wildlife habitat improvement, they also do an outstanding job of getting folks involved in the outdoors through their outreach efforts."

The Federation's primary focuses in Missouri are on habitat enhancement, promoting hunter access, wild turkey research, and outreach and education. Since 1985, the Federation has invested \$3.5 million in Missouri. The Federation's habitat enhancement

projects have improved almost 35,000 acres in the state. Significant dollars have also been spent on education, scholarships, and outreach events for youth, women, and people with disabilities.

In recent years, the Federation's state chapter has provided significant funds to help landowners make habitat improvements in southwest and northeast Missouri. The state chapter also has partnered with The Nature Conservancy to restore almost 1,000 acres of tallgrass prairie in the Grand River grasslands of north-central Missouri. Learn more at [nwtf.org](http://nwtf.org).

as the basis for management. New conservation concepts centered on the importance of habitat and the responsibility to safeguard the resource.

Conservation—the concept of wise use—allowed the harvest of wildlife at sustainable levels.

The fledgling Conservation Department based many of its programs on a benchmark study written by biologists Rudolf Bennitt and Werner Nagel, *A Survey of the Resident Game and Furbearers of Missouri*, published in 1937. Their findings were grim—only about 2,500 turkeys and 1,800 deer remained in the state. Prairie chickens, ruffed grouse, beavers, otters, and raccoons also were scarce. Other species, such as passenger pigeons and Carolina parakeets, were long gone.

In 1937, hunters harvested only 106 deer in the entire state. In 1938, the Department closed deer and turkey seasons statewide and began live-trapping and restock-

ing deer throughout the Ozarks. Efforts to provide the "big three" of food, water, and cover for deer and other wildlife took many forms. For example, in 1939, MDC launched a pond program, helping Missourians create more than 50,000 new ponds for wildlife in the decade that followed.

Through the 1940s and 1950s, deer and wild turkey were the focus of the Department's major restoration efforts. The Department developed deer refuges with food plots and protected these areas from wildfire, overgrazing, and poaching. Deer herds responded dramatically. By 1944, Missouri's deer population increased to an estimated 15,000, and a bucks-only deer season reopened in 20 southern counties. That year, 7,557 resident hunters harvested 583 deer. In 1959, deer season reopened in all Missouri counties, ushering in a new focus of deer management to maintain desirable population levels. Today, Missouri offers some of the best deer hunting in the country. In recent years, nearly 500,000 gun and bow hunters typically harvest around 300,000 deer annually.

"Deer management today is about managing for stable populations at socially acceptable levels," says Jason Summers, MDC resource scientist. "About 93 percent of Missouri's land is in private ownership. As a result, landowners hold the key to managing deer numbers in rural Missouri. MDC works with landowners to help them achieve their deer management goals."

Today, Missouri is also one of the top wild turkey hunting states in the country, but this was not always the case. Back in 1938, turkey season was closed because there were so few birds. In 1952, the final tracts of what would become the Peck Ranch Conservation Area were acquired for turkey restoration. From 1954 to 1979, turkeys trapped at Peck Ranch and other areas of the state were relocated to 142 sites in 87 counties. Missouri's



**Through the 1940s and 1950s, white-tailed deer and wild turkey were the focus of the Department's major restoration efforts. The Department developed deer refuges with food plots and protected these areas from wildfire, overgrazing, and poaching. Today, nearly 300,000 deer are harvested each year.**

modern turkey season began when the spring turkey season reopened in 1960, during which 698 hunters bagged 94 birds. Fall archery season reopened in 1975, and the first fall firearms season followed in 1978.

Missouri's wild turkey restoration program is a huge success, and today, Missouri's turkey population is estimated to be about 500,000 birds strong. All 114 counties now have stable turkey populations that allow hunting, and 101 of these counties have wild turkeys that can be traced back to restocking efforts. In 2011, more than 50,000 birds were harvested.

### PAST SUCCESSSES LEAD TO A BROADER CONSERVATION BASE

As Missouri's deer and turkey populations were successfully recovering, it was apparent that many other plants and animals benefited from the improved habitat. "In the early years, those key species were so deficient in numbers that they demanded attention," says Deputy Director Tim Ripperger. "But as the conservation field has matured, we began to recognize that those game species represent just a small slice of Missouri's total biodiversity and there are many other creatures out there, some large, many small, that are similarly threatened."



**Peregrine falcons have adapted to urban landscapes. You can view peregrine falcons raising chicks in a nest box at Ameren's Sioux Energy Center in St. Louis through a cooperative effort among the Department of Conservation, Ameren Missouri, and the World Bird Sanctuary. A camera near the birds' nest box provides video that can be viewed at [mdc.mo.gov/node/16934](http://mdc.mo.gov/node/16934).**

Beginning in the 1970s, the Department made a pledge to Missourians to embrace a broader conservation approach called the Design for Conservation. It was a plan to conserve the best examples of forests, prairies, marshes, and glades; to obtain land for recreation, forestry, and conservation of critical habitat; to increase services to the public in the areas of wildlife and forest conservation; and to create a system of conservation nature centers throughout Missouri.

Missouri voters approved the Design for Conservation sales tax in 1976. This one-eighth of 1 percent sales tax provides dedicated funding required for the conservation of forests, fish, and wildlife. In addition to deer and turkey, a great variety of wildlife benefits from this broader approach to conservation, ranging from Ozark hellbenders and collared lizards to bluebirds and eagles, to otters and, most recently, elk.

"Most of our conservation success stories involve Missourians digging in their heels to turn around declining populations," says Gene Gardner, retired MDC wildlife diversity chief. "Bringing back the bluebird, our state bird, is an excellent example of how people came together and did something about it. Our state bird became much more abundant once people started building nest boxes and creating bluebird trails across the state."

For eagles to rebound, it took a combination of state and federal efforts. Fifty years ago, bald eagles were on the ropes due to habitat loss, poisoning from pesticides such as DDT, and illegal shooting. From 1962 to 1981, Missouri did not have a single known successful eagle nest. Restoration of habitat, aggressive law enforcement, and a national ban on DDT gave eagles a fighting chance. In the 1980s, the Conservation Department placed 74 wild-hatched eaglets in artificial nests throughout Missouri.

As of 2012, more than 200 eagle nests dot the state and bald eagles have been removed from the state and federally endangered species lists. Eagle Days have become popular events throughout the state, with thousands of Missourians flocking to see these majestic birds. In the lower 48 states, the bald eagle population has climbed from an all-time low of 487 nesting pairs in 1963 to an estimated 9,789 nesting pairs.

Peregrine falcons also benefited from MDC restoration efforts in both St. Louis and Kansas City. Experts believed peregrine falcons would find big city skyscrapers as acceptable as steep cliffs, the peregrines' preferred





**MDC continues important restoration and conservation efforts, from the more headline-grabbing species, such as elk (above), to the tiniest insects, such as the Hine's emerald dragonfly (right).**

habitat. As a result of imprinting those sites on a number of nesting peregrines, these birds now return to the city skylines to bear their young, much to the enjoyment of many city-dwelling nature lovers.

## ALL WILDLIFE CONSERVATION

Today's conservationists focus on conserving all plants and animals as well as the natural systems on which they depend. This "all wildlife" conservation approach differs from traditional fish and wildlife management, which focused on restoring single species. After all, the survival of one plant or animal is often inextricably linked to the health and wellbeing of the entire ecosystem.

"I expect many people think the Department's expertise focuses on single species, because some of the best known success stories involve bringing back wildlife that we now highly value," says John Hoskins, retired MDC director. "But today, we strive to conserve wildlife in a broader sense—trees, insects, wildflowers, grasses, ani-



mals, and all the rest. The descriptive phrase often heard is 'preserve and restore our state's biodiversity.'"

## WILDLIFE RESTORATION CONTINUES TODAY

MDC continues important restoration and conservation efforts today, from the more headline-grabbing species, such as elk, to the tiniest insects. In 2011, the Department in partnership with the Kentucky Department of Fish and Wildlife Resources and the Rocky Mountain Elk Foundation relocated 34 wild elk from the Appalachian Mountains of eastern Kentucky to Missouri's Peck

Ranch Conservation Area. Decades of ecological restoration have returned Peck Ranch to conditions similar to those that existed here when elk last trod the Ozark hills 150 years ago.

But “smaller” successes are just as important to conserving Missouri’s complex webs of life. The eastern collared lizards, which almost disappeared from the Ozarks due to overgrown glades, are now more common and widespread due to glade restoration and a successful reintroduction program.

Barn owl populations increased in the 1990s after nest boxes were more widely provided. Although barn owl numbers remain low across the state, they were recently removed from the state endangered species list—illustrating how even small efforts can help wildlife rebound.

Small fens in the Ozarks were restored to help the endangered Hine’s emerald dragonfly, in partnership with landowners and the U.S. Forest Service. This beautiful dragonfly needs a very specific wetland habitat that includes wet soils with crayfish burrows. By removing invading trees and keeping the fens open, we ensure the survival of both the crayfish and the Hine’s emerald dragonfly.

Conserving bottomland hardwood forests and associated wetlands benefits a number of bottomland species, including a declining number of western chicken turtles. Although they are still in danger of extinction, conservation efforts are beginning to show success.



**Not content to rest on past achievements, MDC is forging ahead with efforts to restore prairie chickens to Missouri prairies.**

Conservation efforts are also beginning to stabilize the last remaining populations of the massasauga rattlesnakes in Missouri by managing their wet prairie habitat. Persecuted to near extinction in Missouri from fear or misunderstanding, these snakes eat rodents, other small mammals, and amphibians found in the wet prairies of northern Missouri.

## CHALLENGES REMAIN

These examples are but a few of the many restoration and conservation success stories in Missouri. Reading these

## DUCK STAMPS BENEFIT WILDLIFE AND PEOPLE

Since 1934, the sales of federal Duck Stamps have generated more than \$750 million to help purchase or lease more than 5.3 million acres of waterfowl habitat in the United States. For every \$1 spent on Duck Stamps, 98 cents goes directly to purchase vital habitat for protection in the National Wildlife Refuge System.

Waterfowl are not the only wildlife to benefit from Duck Stamps. Many plants and animals that rely on wetland habitats have also prospered, including a variety of birds, mammals, fish, reptiles, and amphibians. In addition, an estimated one-third of the nation’s endangered and threatened species find food

or shelter in refuges established using Duck Stamp funds.

“The Duck Stamp Program did more than just raise dollars for habitat; the artwork caused more people, outside of hunters, to become passionate and engaged in conservation work,” says Doyle Brown, MDC’s federal aid coordinator. “If there were no Duck Stamps, there would be virtually no waterfowl or other migratory birds in Missouri or in the rest of the country.”

People benefit from the Duck Stamp Program, too. Missourians have places to enjoy their hunting heritage and places to boat, fish, and watch wildlife. Moreover, healthy wetlands help purify water supplies, store floodwater, reduce soil erosion and



sedimentation, and provide spawning areas for fish important to anglers.

Understandably, the Federal Duck Stamp Program has been called one of the most successful conservation programs ever initiated and is a highly effective way to conserve America’s vital wetland resources.





stories of Missouri's citizen-led efforts to restore wildlife, it is easy to think the hard work of conservation is complete. Yet, the same challenges of ensuring sufficient food, water, and cover continue today. In many ways, challenges to wildlife are greater than ever.

"A lot of these habitats are a fraction of what they once were," says Gardner. "The remaining areas must do double duty to help many more plants and animals make the rebound—from wetlands to forests to grasslands. Sometimes that's as easy as leaving habitat edges along crop fields, thinning forests, or using fire to improve habitat."

### BUILDING ON OUR LEGACY

The Department has worked with tens of thousands of Missourians over multiple generations to benefit many wildlife species and their habitats. "There have been some incredible success stories that now make wildlife readily available to any Missourian who wants to get out there and pursue them with either a gun, fishing rod, binoculars, or a camera," says MDC Director Robert L. Ziehmer.

Looking back at Missouri's low point for wildlife, and seeing where we are today, "The promise was

**Ethics are the unwritten rules of traditional outdoor values. Ethics are what guide a hunter's behavior when no one else is looking. Personal accountability, conduct, and decisions cannot be legislated, but they are among the foundations of science-based conservation and wildlife management.**

absolutely fulfilled," Ziehmer continues. "In the case of deer, populations were restored to a level where we now support annual deer harvest totaling 300,000 taken by archery and gun hunters. We have 500,000 deerhunters, generating more than \$1.1 billion of overall business activity and supporting more than 11,000 jobs. In the case of deer, turkey, and other wildlife species, absolutely that promise has been fulfilled."

MDC is dedicated to helping Missourians conserve our state's great natural heritage for new generations. Not content to rest on past achievements, the Department is forging ahead with efforts to save prairie chickens, boost quail populations, and find new approaches and partners to further conserve and restore Missouri's important forest, fish, and wildlife resources. □





Michael L.



# A New Dawn for Missouri's Wetlands



# W

HEN YOU SEE A SUNRISE at a wetland, it will change your perception of the place forever. From the darkness, liquid light pours forth and fills the wetland.

The world takes on a golden hue. The sound of thousands of gabbling waterfowl electrifies the air. You'll get pulled right into the pulse of the wetland.

These dynamic interchanges between land and water have long held a special place in the hearts of Missourians. As they should. Wetlands are the most productive ecosystems in the world. Because of their value to countless species of plants and animals, conserving and restoring wetlands is a primary goal of MDC.

"Our mission is to conserve forest, fish, and wildlife resources. And wetlands are very productive in terms of all three," says Gene Gardner, retired MDC wildlife diversity chief. "Even Missourians who never visit wetlands are better off because healthy wetlands exist. Wetlands improve water quality, help reduce flood damage to farms and communities, and help recharge local water supplies."

## WETLANDS BENEFIT WILDLIFE

Wetlands are biologically rich, with a greater mix of plant and animal species than is found in drier habitats.

They provide excellent habitat for all kinds of waterfowl, shorebirds, and songbirds. More than a third of the birds that regularly nest in, or migrate through, the state depend on wetlands for part of their life cycle. More than 200 rare or endangered wildlife species use wetlands as their primary habitat. Wetlands along streams and rivers are important as fish spawning and rearing areas, too.

Managed wetlands benefit from vegetation and water-level management because waterfowl, migrating shorebirds, and hundreds of other wetland-associated wildlife require a variety of wetland habitats and water depths. Some migratory birds require deep, open water. Others require shallow water or newly exposed mud flats.

Just as each species of bird has different migration times, they also have different habitat needs during migration. Raised hills or mounds in a wetland can increase the attractiveness of the area for shorebirds. Vegetation on these mounds attracts nesting birds. Varying water depths result in greater wildlife diversity.

## THE EBB AND FLOW OF MISSOURI'S WETLANDS

Missouri once had about 4.8 million acres of wetlands, created by the state's two major river systems and their tributaries. Today, about 87 percent of Missouri's historic wetlands have been lost through filling, draining, or changing the flow of groundwater.

More than 50 years ago, MDC began developing conservation areas to re-create a small portion of the wetlands lost in the previous 150 years. Fountain Grove and Ted Shanks conservation areas (CAs) in the north, Duck Creek CA in southeastern Missouri, and Montrose and Schell-Osage CAs in the west were the vanguard of Missouri's wetland restoration.

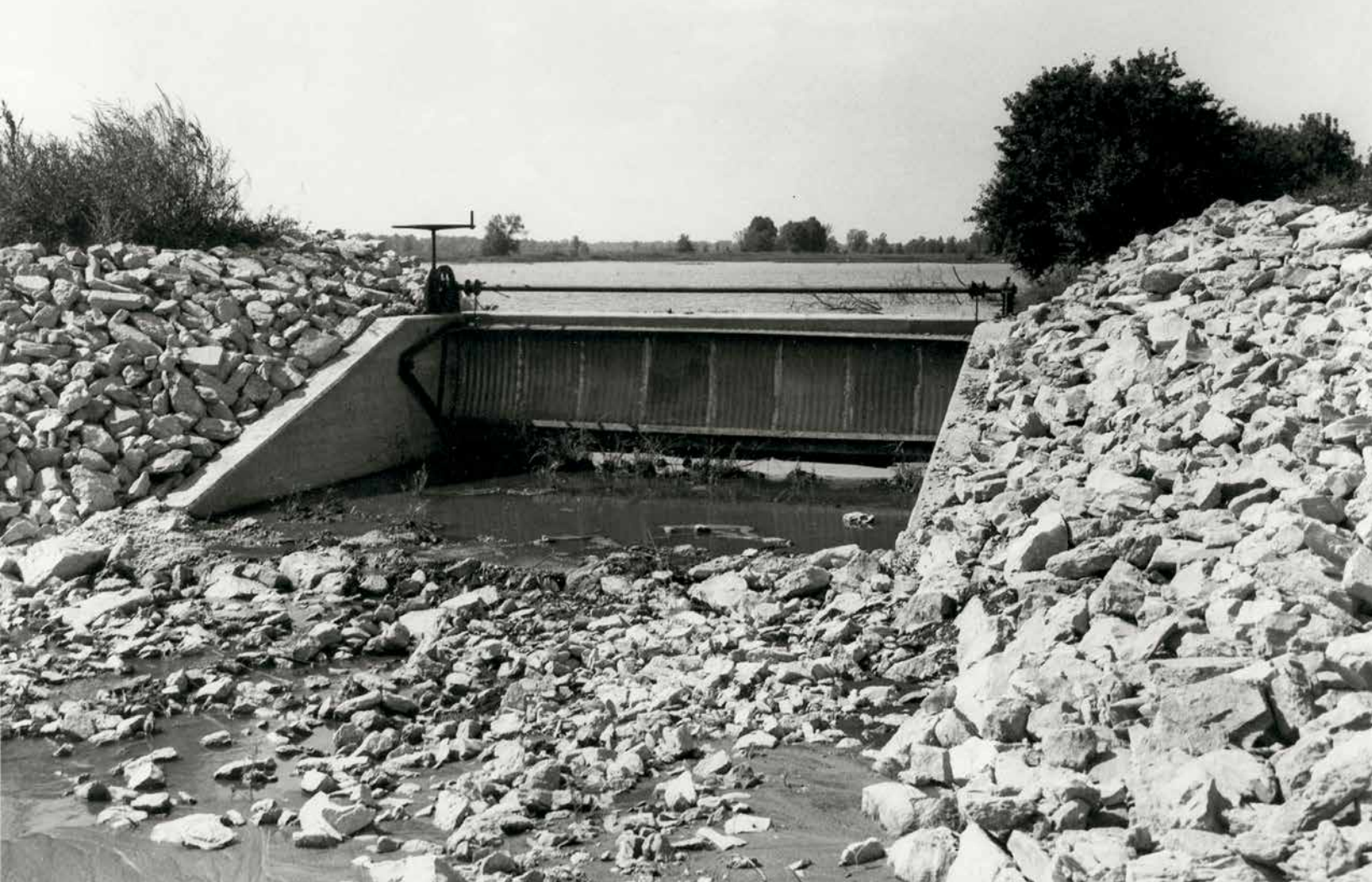
Beginning in the 1940s and 1950s, wetland managers began restoring wetlands through engineering. Low areas that were formerly wetlands were excavated so they would hold more water. Levees were built, not to keep water out but to hold water in. Water control structures such as valves, screw gates, and culverts were built so managers could manipulate water levels. Where natural flooding was lacking, pumps were installed to ensure water supplies.

Today, many of these early wetland areas are facing significant challenges. Not only are original working parts including levees, water control structures, canals, and pumps beyond their life expectancy, but extreme landscape changes including severe flooding and heavy



**A black-necked stilt wades along a shore, in search of food. Wetlands provide excellent habitat for all kinds of waterfowl, shorebirds, and songbirds.**





**Better water management infrastructure is at the heart of managing Missouri's wetlands. Above, a Fountain Grove Conservation Area dam in 1949. Right, the new main outlet structure for Fountain Grove's west side. Guiding principles of these improvements include developing ecologically based rehabilitation concepts and to avoid "continual repair" issues.**

sedimentation have had unforeseen and devastating effects on certain areas.

## INITIATIVE IMPROVES MISSOURI'S OLDEST PUBLIC WETLANDS

Today, we know far more about the science of wetland ecology and management. MDC's Golden Anniversary Wetlands Initiative allows us to put that knowledge to work at Missouri's oldest wetlands to benefit wildlife and the people that enjoy these areas.

"No two wetland areas were alike when we built them, and no two will be alike as we return to give them new life," says Dick Vaught, retired MDC waterfowl research biologist.

These improvements are diverse and serve the specific needs and demands of local wildlife habitat and different



water management challenges. Guiding principles of these improvements are to develop ecologically based rehabilitation concepts, to incorporate 21st century engineering and science-based approaches, to avoid "continual repair" issues, and to assemble diverse partnerships with an eye toward innovation.

The interactions between plants, animals, soils, and water within wetlands are intricate and complex.

“Variety is not only the spice of life, but in wetland systems, it is also the glue that binds it all together,” says Frank Nelson, project manager for the Duck Creek CA renovation. “It is the overall number of different species that allows the food webs to be connected, keeps nutrient cycles churning, and allows Missouri’s wetlands to stay healthy.”

To get that biodiversity, wetland managers need subtle control over the water that ebbs and flows over wetlands. Better water management infrastructure is at the heart of managing Missouri’s wetlands.

One tool that has led to a greater understanding of how water flows through these areas is LIDAR radar mapping from low-flying aircraft. Area managers and project engineers study LIDAR maps to better understand slight elevation changes and topography details. This lets them do a better job of placing water control structures to mimic natural water flow while reducing infrastructure.

“This is incredibly important for areas in wetlands such as mud flats, where a few inches of water can spell the difference between successful feeding for migratory waterfowl, or something akin to leaving the back door open for invasive species that can quickly inundate an area,” says Nelson.

## WETLANDS BENEFIT PEOPLE

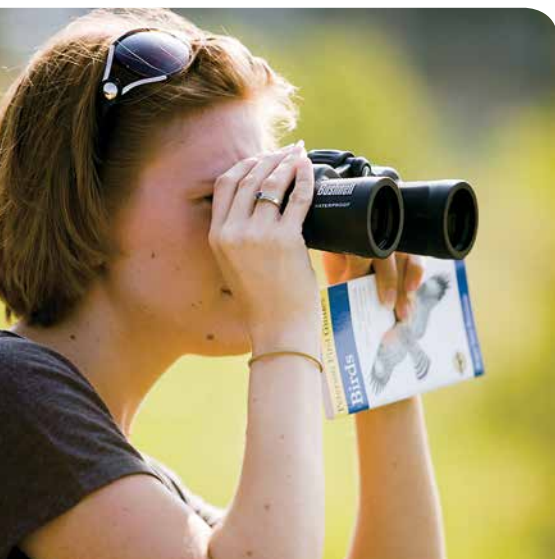
MDC now manages more than 112,000 acres of diverse wetland habitats throughout the state. Missouri’s citizen-led efforts have helped to restore waterfowl populations to levels that rival the plentiful 1970s. Although waterfowl are sometimes the most visible of Missouri’s wetland achievements, the value of these areas reaches far beyond ducks and geese.

During the past fifty years, wetland restoration efforts have focused on increasing habitats, restoring floodplains, and managing for a greater diversity of species. Today, the value of these areas is more apparent because they provide recreation for millions of people through hunting, fishing, boating, and wildlife viewing.

Wetland ecosystems also play an important role in water quality, pollution control, and flood control. Wetlands improve water quality by acting as settling basins for upland runoff. Because of their low gradient and thick vegetation, wetlands slow the flow of water, allowing suspended soil particles to settle out. The filtered water is then released into adjacent streams and aquifers.

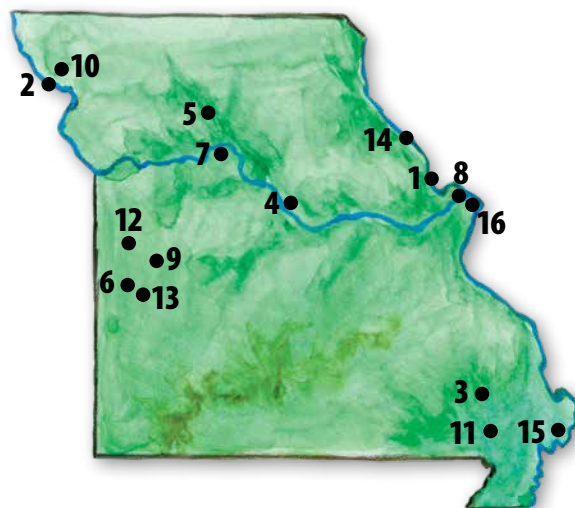
Wetlands reduce pollution levels by absorbing some of the soluble nutrients in the water flowing through them. In partnership with MDC, wetlands at Eagle Bluffs CA

## VISIT MISSOURI’S PUBLIC WETLANDS



Enhancing Missouri’s wetland areas continues to be a primary goal of MDC. These areas provide critical habitat for migratory and resident wildlife, and create excellent opportunities for a host of outdoor recreation activities. Learn more at [mdc.mo.gov/node/4222](http://mdc.mo.gov/node/4222).

1. B.K. Leach Memorial Conservation Area
2. Bob Brown Conservation Area
3. Duck Creek Conservation Area
4. Eagle Bluffs Conservation Area
5. Fountain Grove Conservation Area
6. Four Rivers Conservation Area
7. Grand Pass Conservation Area
8. Marais Temps Clair Conservation Area
9. Montrose Conservation Area
10. Nodaway Valley Conservation Area
11. Otter Slough Conservation Area
12. Settle’s Ford Conservation Area
13. Schell-Osage Conservation Area
14. Ted Shanks Conservation Area
15. Ten Mile Pond Conservation Area
16. Columbia Bottom Conservation Area







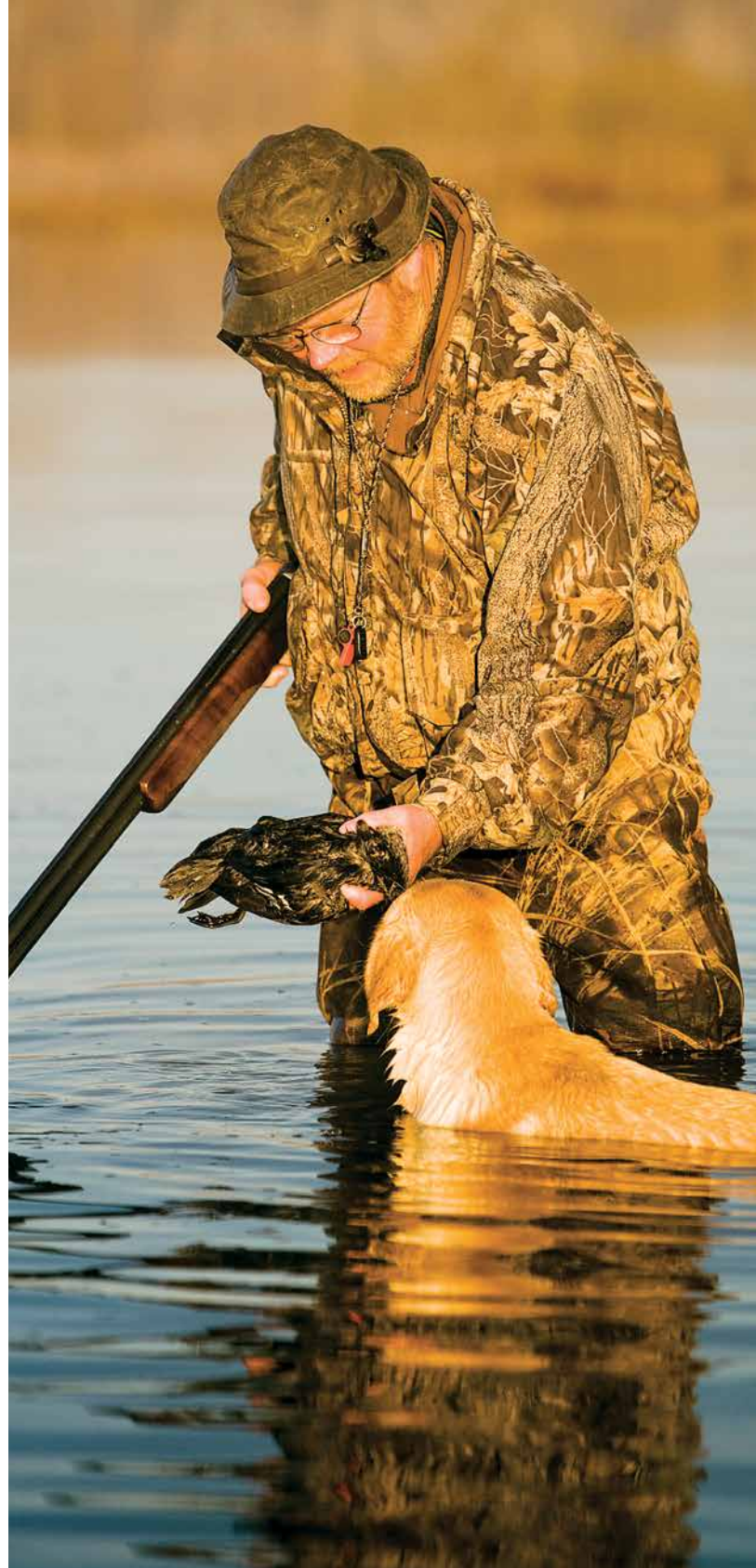
accept wastewater from the City of Columbia as a secondary wastewater treatment. The effluent provides water and nutrients for wetland habitats.

Wetlands also play a vital role in flood control. Wetlands act as giant sponges made up of organic matter and specialized plants—some of which can absorb up to 18 times their weight in water. During periods of heavy rains, wetlands hold water and release it gradually back into the watershed. This helps reduce peak water flows and diminish flood risks for communities and farmland downriver.

Following the devastating Flood of 1993, some badly damaged areas were purchased as public lands and restored to wetlands, such as the Big Muddy National Wildlife Refuge. These restored areas provide not only wetland wildlife habitat but additional water storage during times of peak flow and flooding.

### PARTNERSHIPS MAKE FOR WETLAND CONSERVATION SUCCESS

The renovation and expansion of Missouri's public wetlands requires funding and partnerships as diverse as the wetland habitats themselves. Waterfowl hunters continue to support wetland conservation by purchasing hunting permits, Duck Stamps, and by paying federal excise taxes on guns and ammunition. In addition, funding for wetland habitat restoration in Missouri also comes from permit sales and the one-eighth of 1 percent conservation sales tax. The dedicated sales tax provides consistent long-term funding for the conservation of our forest, fish, and wildlife resources and preserves Missouri's outdoor heritage.



**During the past fifty years, wetland restoration efforts have focused on increasing habitats, restoring floodplains, and managing for a greater diversity of species. Today, the value of these areas is more apparent because they provide recreation for millions of people through hunting, fishing, boating, and wildlife viewing.**

Key partnerships helped achieve a partner-driven wetland management plan for Missouri. MDC partners with the U.S. Fish and Wildlife Service, the North American Wetlands Conservation Council, U.S. Army Corps of Engineers, U.S. Department of Agriculture, Ducks Unlimited, Missouri Waterfowl Association, and many others. The tireless efforts of many conservation-minded citizens, local duck clubs, and many other partners have also helped to make wetland restoration a reality.

Since 1989, the North American Wetlands Conservation Act (NAWCA) has also provided funding to improve and expand Missouri's wetlands. To date, more than \$14 million in project funding has conserved more than 86,000 acres of wetland habitat in the Show-Me State. Many partnerships that include state agencies, private landowners, corporations, and

**B.K. Leach Conservation Area near Elsberry is one of 16 public wetlands in Missouri. "Even Missourians who never visit wetlands are better off because healthy wetlands exist," says Gene Gardner, retired MDC wildlife diversity chief.**

other nongovernment organizations continue to work together to develop projects to conserve Missouri's wildlife habitat through NAWCA grants.

The Farm Bill's Wetlands Reserve Program (WRP) and Conservation Reserve Program also help Missouri's landowners protect, restore, and enhance wetlands on their property. The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) provides technical and financial support to help landowners restore wetlands. Missouri is one of the top ten states in the nation in acres of wetlands restored through the WRP. Currently, there are more than 140,000 acres of WRP in Missouri, with the majority of these acres enrolled in permanent easements. These wetlands will remain on the Missouri landscape indefinitely.

## THE FUTURE OF OUR WETLANDS

As human populations increase, the pressure for converting wetlands to less "natural" uses will continue. To support the conservation of our remaining wetlands, we must continue to seek a better understanding of how wetlands work to benefit wildlife and people.





## DUCKS UNLIMITED

Ducks Unlimited (DU), a key partner in wetland conservation, also celebrates its 75th anniversary this year. DU is the world's largest nonprofit organization dedicated to conserving North America's continually disappearing waterfowl habitats.

"The Missouri Department of Conservation and Ducks Unlimited are natural partners. Our missions emerged from the visions of conservation leaders in 1937, and it is most fitting that we mobilize forces to revitalize the crown jewels of Missouri's storied wetlands," says Ken Babcock, DU's national headquarters senior director of operations and former MDC assistant director.

Like MDC, DU was founded in 1937 during the Dust Bowl era when habitat conditions were very bleak. The organization has since blossomed into the model for hunter-based conservation organizations, completing more than 20,000 projects, conserving more than 12 million acres and raising more than \$3.1 billion for conservation.

Missouri continues to be one of the top states in Ducks Unlimited with more than 19,600 members statewide. In 2011, more than 90 Missouri DU chapters held 140 events and raised nearly \$950,000 for habitat conservation. To date, these Missouri DU chapters have helped conserve 105,000 acres in Missouri.

"The MDC partnership with Ducks Unlimited is one of the strongest and most effective in the nation," says Mark Flaspohler, DU manager of conservation programs for Missouri. "Ensuring these critical habitats are forever protected from development is a significant step in the right direction for wildlife, waterfowl, flood protection, and water quality."

MDC and Ducks Unlimited work together to conserve critical waterfowl habitat in Missouri as well as the Prairie Pothole Region of Canada, known as the "duck factory," where the majority of Missouri's migratory waterfowl come from each year. Providing important wetland habitat from Canada to Mexico is a vital part of achieving the goals of the North American Waterfowl Management Plan. To make this possible, contributions from the states are matched by North American Wetlands Conservation Act (NAWCA) funds, as well as DU, Inc., and DU Canada.

With this year's contribution of \$275,000, MDC has reached the \$5 million mark for donations to waterfowl breeding grounds in Canada. With the support of MDC during the past five years, Ducks Unlimited has conserved, enhanced, and restored 235,059 acres of prime breeding habitat and positively influenced an additional 1.2 million acres.

"It is the committed support of partners like DU that makes waterfowl conservation and the North American Waterfowl Management Plan a success," says DeeCee Darrow, retired MDC Wildlife Division chief.



**A flock of mallard ducks fly over Squaw Creek National Wildlife Refuge.**

In Canada, DU uses a combination of strategically targeted programs, agricultural extension, and public policy efforts to advance conservation goals. Direct habitat programs such as land acquisition and conservation easements help secure the remaining habitat base and provide restoration opportunities. Agricultural extension programs focus on adding nesting cover and improving wetland conditions, while the promotion of waterfowl-friendly agricultural practices provides positive economic benefits to producers.

"MDC's investment in Canadian waterfowl habitat yields direct, tangible returns for Missourians," says MDC Director Robert L. Ziehmer. "Leveraging our contribution and money from other states four-to-one lets us put \$2 million into protecting critical nesting habitat that sends millions of ducks winging down the Mississippi Flyway to Missouri and beyond each fall."

That job has gotten easier with science-based research and a decade of wetland renovation projects. However, attempting to manage highly erratic water flow in an altered landscape, as well as predicting and attempting to reduce invasive species, is a never-ending mission.

"One of the challenges for conservation area managers is that plant and animal communities never sit still. There is always a group of species on the rise while others are on the fall," Nelson says. "Management is the art of trying to tweak the system in a way to get a reliable response to benefit public use while serving resource needs. For every one of our actions there is a response. Some of these can be anticipated while others cannot. No doubt nature will always have a new challenge for us tomorrow."

Gardner echoes Nelson's acknowledgment of the tough job of managing Missouri's wetlands in the future. "In managing wetlands, challenges will become even greater. We've already seen that in 2011, with elevated river levels and local drought conditions. Continued population growth and changing land use also influence our wetlands and how they function. It is up to us to find a balance so these wetlands will continue to benefit people and wildlife."

But Gardner is proud of where state wetlands have been and where they are going. "Generations of Missourians have enjoyed these for more than 50 years, and it's our job to ensure these areas are here for their kids and grandkids to enjoy." □

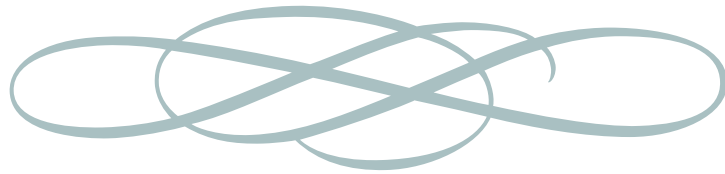




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# Healthy Waters



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EALTHY WATERS ARE ONE of the foundations of our quality of life. We are fortunate to live in a state that has abundant water resources, from the

meandering bends of the country's two largest rivers to clear Ozark streams. Missouri has more than 110,000 miles of streams, nearly 276,000 acres of public lakes, and about 300,000 small private ponds. The state bubbles with a thousand springs, including some of the largest in the world. Ensuring that these waters stay healthy benefits our communities, our neighbors downstream, and the state's fish and wildlife.

"What is truly amazing is that even though just 2 percent of the state is water, at the same time that our population has doubled, we've seen many of those waters improve through conservation efforts. That is a tremendous accomplishment," says Joe Dillard, retired MDC fisheries biologist. "That benefits our anglers and

our communities as well as the fish and wildlife that depend on our state's streams, rivers, and reservoirs."

## MISSOURI'S VAST AND DIVERSE WATERWAYS

Our state has one of the greatest varieties of freshwater fish in the nation. The state's waterways connect anglers with a wide assortment of sport fish, from smallmouth bass in spring-fed Ozark streams to big catfish lurking in our northern streams and in the murky waters of our big rivers. From countless ponds, lakes, and reservoirs, we fill our pastimes with friends and family, hoping to reel in a keeper.

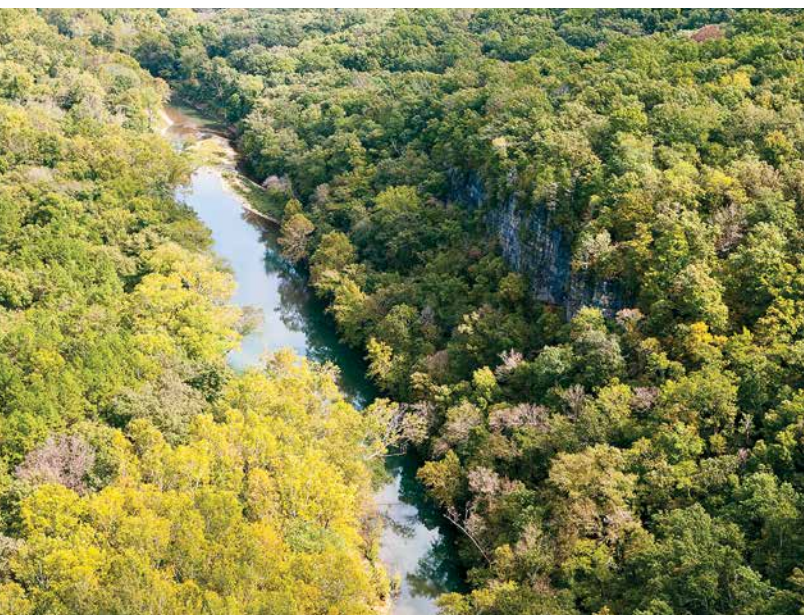
Fishing continues to be one of our most popular outdoor activities. More than 22 percent of Missouri residents fish sometime during the year. But healthy waters do more than just support great fishing.

Missourians depend on both surface water and groundwater sources for drinking water and other uses. Half of the state, including Kansas City and St. Louis, use surface water for their drinking water. The Missouri River is the source of tap water for more than a million people. And many rural Missourians get their tap water from wells.

"Ensuring healthy waters involves many things," says Chris Vitello, MDC Fisheries Division chief. "MDC works to provide enjoyable fishing and also to maintain aquatic biodiversity, reduce the effects of nuisance species, protect waterway habitats, and inform and educate the public about Missouri's aquatic resources."

The health of Missouri's waterways is directly tied to the health of the lands around them. "By using a watershed approach to conservation, which is looking at all the land that drains into a particular body of water, we can improve water quality by making sure that habitat along stream banks are healthy," says Lisa Allen, MDC state forester. "For example, a healthy forest helps to reduce erosion by making sure that sediment doesn't enter a stream and block out light, killing aquatic plants or preventing their growth. And forest canopies help shade waters and keep stream temperatures constant, which benefits stream life."

Broad partnerships make watershed conservation work. MDC works with citizen Stream Teams, as well as other agencies, such as the Missouri Department of Natural Resources and the U.S. Department of Agriculture's Natural Resources Conservation Service to ensure that healthy waters continue to benefit people and wildlife.



**The health of Missouri's waterways is directly tied to the health of the lands around them. The Eleven Point River near Alton has healthy forests surrounding it, helping to reduce erosion by making sure that sediment doesn't enter a stream and block out light, killing aquatic plants or preventing their growth.**





## STREAM TEAMS

Stream Teams help Missourians conserve and improve more than 110,000 miles of streams through stream cleanups, tree plantings, water quality monitoring, storm drain stenciling, and by leading educational projects.

More than 4,000 Stream Teams throughout the state focus the can-do attitude of more than 76,000 volunteers, who contributed more than 146,000 hours last year to enhance and restore Missouri streams. Since the program began, Stream Teams have performed 1.7 million hours of volunteer work and have removed more than 8,000 tons of trash from Missouri's waterways.

"The benefit to Missouri streams is incalculable. This is citizen-led conservation at its best," says Sherry Fischer, MDC stream services program supervisor. "After gaining a firsthand knowledge of the problems, solutions, and needs of Missouri's streams, volunteers are also better equipped to speak out on behalf of healthy waters."

Missouri Stream Team is a joint effort of MDC, the Conservation Federation of Missouri, and the Missouri Department of Natural Resources. Today, Missouri's Stream Team program is nationally recognized and serves as a model for other states. Anyone

Missouri's wetlands, such as this one on Eagle Bluffs CA, actually support more plants and animals acre for acre than nearly any ecosystem on Earth. Early settlers figured wetlands were too productive to leave to frogs and ducks, and during the 1800s and early 1900s, 87 percent of Missouri's marshes and swamps were drained or filled. In 1946, the Department began intensive efforts to restore more than 112,000 wetland acres. Waterfowl populations, which use Missouri's wetlands as critical pit stops during migration, have responded favorably, reaching numbers not seen since the mid-1950s.

can join. For help forming a Stream Team or finding an active one in your area, call 1-800-781-1989 or visit [mostreamteam.org](http://mostreamteam.org).

## URBAN WATERSHEDS

Watersheds link our land and communities through water. Regardless of where you live in Missouri, you are a part of a watershed that drains to a local creek, which in turn eventually joins the Missouri or Mississippi rivers. We each play a part in ensuring that healthy waters reach our neighbors downstream.



The quality of our water depends on how we use the watershed surrounding it. Natural landscapes easily absorb rainfall. Altered landscapes, including both rural and urban development, cause higher rates of runoff. Urban landscapes include mostly hard surfaces such as pavement, buildings, roads, and roofs. Even lawns, with their shallow root systems and compacted soil, act like impervious surfaces.

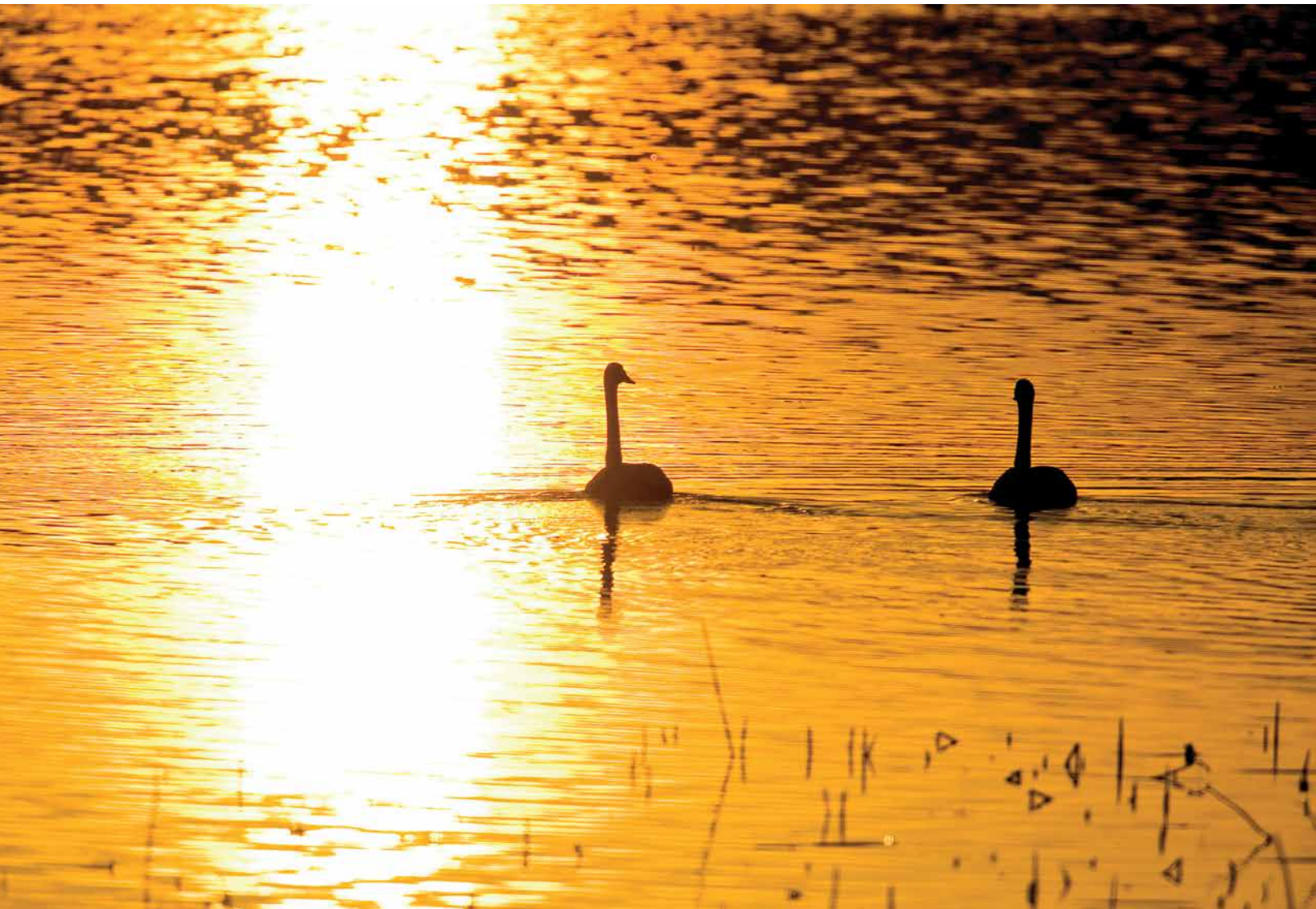
When rain hits these areas, everything in its path—including pesticides, fertilizers, trash, detergents, pet waste, motor oil, and more—can flush into storm drains that lead directly to streams and rivers. This creates pol-

luted storm water that can harm aquatic life and make rivers unsafe for swimming and fishing. The large amount of impervious surfaces in urban areas also increases the quantity of storm water entering our waterways leading to erosion and flooding problems.

“A typical city block can generate five times more storm water runoff than a forested area of the same size,” says Angie Weber, MDC community conservation planner.

Ensuring healthy water involves the efforts of everyone. Fortunately, many communities, such as St. Louis, are doing their part to improve watershed conservation. In conjunction with MDC’s community conservation planners, St. Louis installed specially designed pervious concrete sidewalks and 52 rain gardens to capture and treat storm water along South Grand Boulevard, helping to improve area streams. The rain gardens are basins with native plants that act like a sponge, soaking up rainwater that runs off roofs,

**A pair of trumpeter swans swim at sunset at a MDC wetland area. The Department strives to provide healthy and sustainable fish and wildlife habitats along Missouri’s big rivers and has broad partnerships to help achieve these goals.**





roads, and other hard surfaces. Rain flows through the pervious sidewalks into rock storage areas below, and then water slowly filters into the ground.

## BIG RIVER CONSERVATION

MDC is also active in promoting healthy waters and habitats along the Missouri and Mississippi rivers. “Missourians are becoming more connected to the big rivers,” says Mark Boone, MDC big river specialist. “The public fishing opportunities are great thanks to MDC sport-fish management efforts, and MDC has greatly improved access with more conservation areas as well as boat ramps developed in partnership with communities all along the rivers. Additionally, national attention on big river water quality has helped promote important habitat conservation work along the Missouri and Mississippi rivers.”

The Department strives to provide healthy and sustainable fish and wildlife habitats along the big rivers. MDC works with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and other federal and state agencies to implement ecosystem-based management of the Missouri, Mississippi, and White rivers and their floodplains, which focuses on natural resource conservation and enhancing recreational opportunities. For example, MDC has been able to increase and enhance wetland habitats such as seasonal wetlands and bottomland hardwoods. MDC cooperates with other agencies on the Upper Mississippi River Environmental Management Program for biological monitoring and habitat restoration, and provides input to the Upper Mississippi River Navigation and Ecosystem Sustainability Program, both funded by the U.S. Army Corps of Engineers.

“Improvements to wetlands at conservation areas, such as Fountain Grove, Eagle Bluffs, Duck Creek, Columbia Bottom, and B.K. Leach Memorial, just to name a few, provide critical habitat for resident animals and migratory waterfowl. These areas also provide important recreational value for Missourians,” says Paul Calvert, MDC Fisheries Division field operations chief.

“Interested landowners and conservation groups have also been instrumental in wetland conservation,” says Calvert. “The Confluence Partnership is an excellent example of the value of partnerships and citizen conservationists in improving fish and wildlife habitats.”

The Confluence Partnership is a team of nonprofit partners, such as the Great Rivers Habitat Alliance and Ducks Unlimited, and a core of 20 cooperating local, state,



**Missouri Stream Team is a joint effort of MDC, the Conservation Federation of Missouri, and the Missouri Department of Natural Resources. Today, Missouri's Stream Team program is nationally recognized and serves as a model for other states. Stream Teams help Missourians conserve and improve more than 110,000 miles of streams through stream cleanups, tree plantings, water quality monitoring, storm drain stenciling, and educational projects.**



and federal agencies. They have conserved more than 13,000 acres of land near the confluence of the Missouri and Mississippi rivers to help improve water quality and provide more outdoor recreation opportunities.

## CONSERVING WETLANDS THROUGH WRP

Wetlands once made up almost 11 percent of the state's presettlement acres, or 4.8 million acres. Today, wetlands cover close to 850,000 acres in Missouri, up from less than 640,000 acres, thanks to several restoration programs available to landowners. The Wetlands Reserve Program (WRP) is considered the nation's premiere wetland restoration program, having vastly increased and improved our country's wetlands.

The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) administers the WRP program. Beginning in 1995, Wetland Emphasis Teams made up of NRCS and MDC personnel were developed to assist landowners with all aspects of their wetland management plans.

"This blend of expertise is why Missouri is one of the top five states in the nation for restoring wetlands,"



**The faster rainwater drains off surfaces, the quicker ditches, streams, and rivers reach their flooding points. Water that drains slowly has a greater chance of being absorbed into the ground. Help slow down runoff by mowing less, creating rain gardens, and using gravel and other porous surfaces for driveways.**



**Livestock can cause streambanks to erode, sending soil into the water where it clogs fish gills and blocks sunlight from aquatic plants. Fence livestock off and provide an alternate water source. MDC offers a cost-share program that reimburses a portion of the cost of such a system.**

says Kevin Dacey, Missouri NRCS state office natural resource specialist and WRP coordinator. "Missouri's success is proven in the numbers. Almost 900 WRP tracts cover more than 140,000 acres of restored wetlands."

"There are numerous benefits from wetland restoration," says Dacey. "Wetlands are like sponges during floods. They retain floodwaters and then release them slowly. They also recharge ground water and help improve water quality. Many wetland plants and algae absorb excess nutrients in the waters passing through the wetland. One of the best features of wetlands is the recreational opportunity they offer seasonally from hunting and fishing to bird and wildlife watching."

## PARTNERSHIPS BENEFIT STREAM LIFE

Partnerships are also improving stream connectivity, important for many fish species. In one recent MDC cost-share project, a Niangua River clear-span bridge was constructed at Williams Ford in Dallas County. This bridge improves access for residents during floods and enhances critical habitat for the state endangered Niangua darter by improving stream connectivity and aquatic organism passage. Projects that stabilize and improve Niangua darter habitat benefit numerous other aquatic species.

In another project, MDC assisted the Shannon County Commission with installation of a low-water



## “CANARIES” FOR HEALTHY WATERS

Aquatic threatened and endangered species are often the equivalents of “canaries in the coal mine.” They are indicators of healthy waters—both above and below ground. Working to conserve these endangered species generally means improving water quality, which ultimately benefits other aquatic species as well. It also ensures healthy waters for the people who depend on it for drinking water and other uses.

One such species, the Ozark hellbender, could be readily found in many of Missouri’s clear cold-water streams until the 1980s. But the populations of these long-lived, large aquatic salamanders have declined significantly due to habitat degradation, poor water quality, and other factors. Habitat restoration and population reintroductions are attempting to reverse this decline. Hellbenders depend on crayfish for their main diet, so the loss of the species could trigger a shift in the aquatic food web. Poor water quality may also result in the decline of other cold-water stream species.

Mussels are another water quality canary in the coal mine. They feed by filtering water through their gills—often purifying the water in the process. They are indiscriminate filterers. What they don’t actually consume is released back into the water, becoming food for small invertebrates. Mussels are not tolerant of elevated

pollution levels, so a drop in numbers can signal water quality issues that may soon affect other aquatic species as well.

Small headwater dams, road crossings, and diminished flows reduce the continuity of streams and the usable habitat for fish. The Topeka shiner, a minnow that once occurred throughout prairies in the Missouri River watershed, is now endangered and found only in a few small, isolated headwater streams. As prairies have experienced disruptions in flow and stream continuity, drought and sedimentation have become more intense. The lack of adequate habitat for Topeka shiners is similar to a lack of air for the canary in the mine.

Many aquatic canaries in our underground streams and caves are much harder to see and understand. The Tumbling Creek cavesnail is a tiny snail found in only one cave system in the world—in Taney County. In the 1990s, surveys showed this cavesnail was in decline. A decade ago, only 30 were found in the entire cave, probably due to poor land management and leaky septic systems in the watershed above the cave. Private landowners have reduced erosion and repaired septic systems, which have helped improve conditions for this species.

A watershed approach to preserving a healthy underground habitat for this tiny snail invigorated the local community and school to



**Mussels are a water quality “canary in the coal mine.” They cannot tolerate elevated pollution levels, so a drop in numbers can signal water quality issues.**

work toward improving water quality above and below ground. This ultimately benefits the community, their neighbors downstream, and the lowly cavesnail.

If an aquatic species is declining due to poor water quality or lack of water, it’s important for us to take notice. They could be our canary in the mine, warning us to improve our streams—otherwise, our community’s healthy waters may soon be at risk, too.

articulating concrete mattress crossing on Mahan Creek. Mahan Creek is a tributary to Jacks Fork River, which is part of the Ozark National Scenic Riverways. The original crossing used the natural stream gravel bed. The county used to dump truckloads of road rock after every high-water event. The new articulating concrete mattress allows for the passage of sand and gravel over the crossing during high-flow events while maintaining stability and provides an ideal surface for aquatic organism passage.

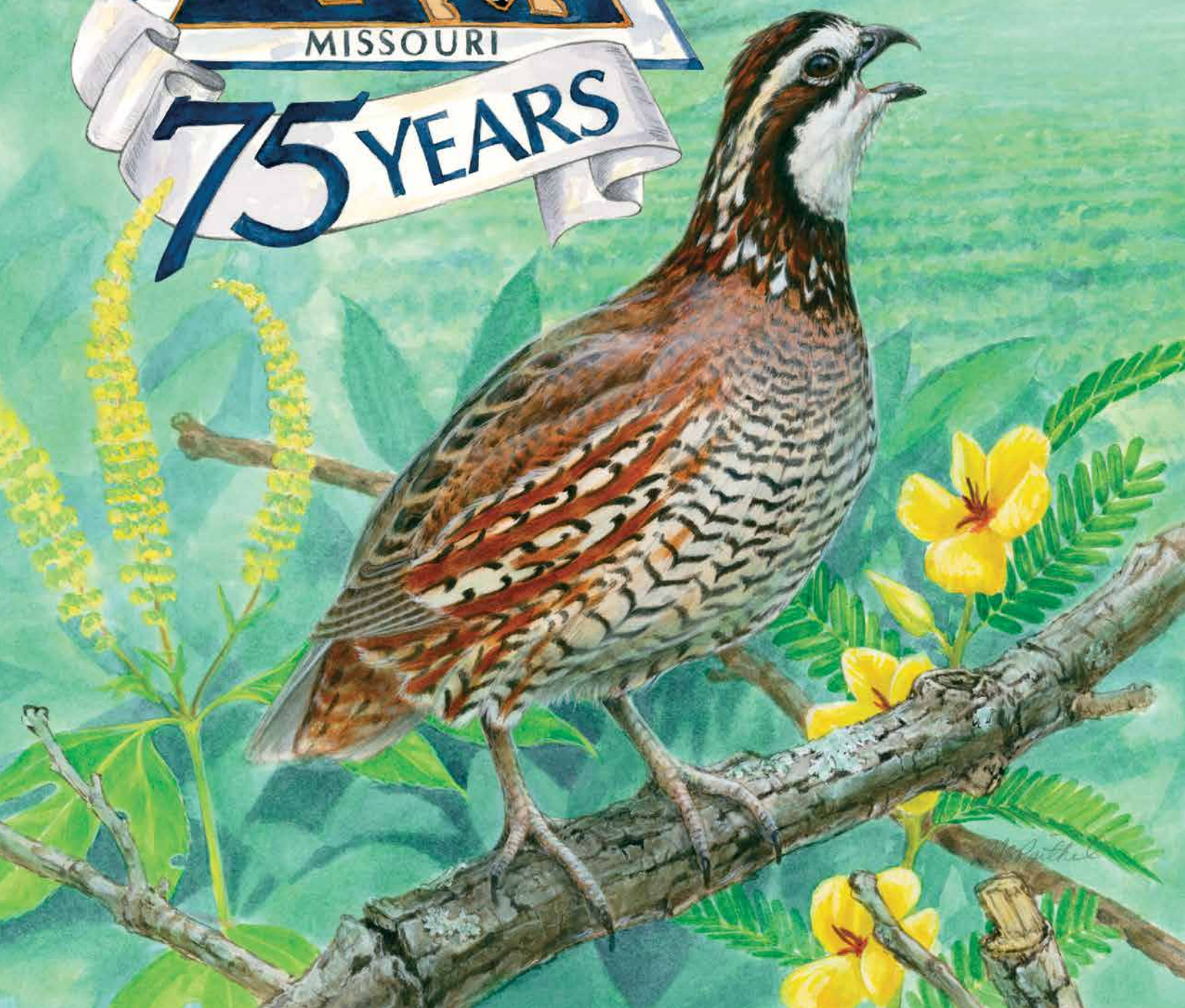
To help fund both projects, MDC secured a grant from the Missouri Conservation Heritage Foundation through their Stream Stewardship Trust Fund, and other sources. MDC provided engineering design and technical guidance and local governments installed the projects. Similar projects involving a variety of partners and designed to enhance aquatic organism passage are underway at selected locations across the state.

## QUALITY WATER MEANS QUALITY LIFE

Missourians have proven that healthy waters are important. They remain dedicated to that foundation of our quality of life in many ways. These efforts continue to benefit people and wildlife, wherever we live. MDC works with Missourians from throughout the state to involve and inspire them to get involved with Stream Teams and with community efforts to improve water quality.

“Missouri is a world-class place to hunt, fish, float, bird watch, hike, and experience nature,” says Robert L. Ziehmer, MDC director. “Those opportunities wouldn’t exist without the hard work done by countless generations to ensure the health of our state’s vast waterways. For the past 75 years, MDC has worked with Missourians, and for Missourians, to make sure that healthy waters benefit us where we live and where we go to enjoy the outdoors.” □







# Private Landowners: The Key to Conservation Success



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HE SUCCESS OF CONSERVATION BELONGS in large part to the generations of hard-working Missourians who have improved their land to benefit the state's forests, fish, and wildlife.

"Private landowners own more than 90 percent of the state's land and are the key to conservation success," says Bill White, MDC Private Land Services Division field chief. "Since the Department was created in 1937, the partnership between MDC and landowners has always been seen as the primary way to make conservation work. That partnership is stronger than ever."

MDC supports landowners' efforts to improve habitat through cost-share programs, initiatives, and outreach efforts. These projects ultimately benefit all Missourians through healthy soils, waters, and forests, as well as abundant fish and wildlife.

"Our natural resource recovery and conservation has evolved through a unique partnership including

the collective wisdom of landowners, outdoor enthusiasts, and government agencies," says MDC Deputy Director Tom Draper. "It is my belief that our relationship with landowners is even more critical today than it has been in the past. Strengthening the partnership between farmers, sportsmen, and conservation agencies has never been more important if we are going to sustain not only soil, water, and natural resources, but ourselves, as well."

### ADVANCING PRIVATE LANDOWNER CONSERVATION

MDC helps landowners improve habitat on their land through both technical assistance and cost-share programs. In 2011, MDC provided service to more than 73,500 rural and urban landowners, including more than 5,500 on-site visits. Oftentimes, that conservation work occurs near conservation areas.

"MDC manages approximately 995,000 acres of public land. Private land surrounding those areas plays an important role in expanding our management efforts," says Mike Schroer, MDC wildlife management chief. "MDC staff offers private land neighbors technical assistance, field days, and workshops to help them better manage their lands."

MDC foresters assist landowners with forest management through one-on-one contacts and educational opportunities, offering technical advice and assistance on how to manage woodlands for wildlife and wood products.

Through the Forest Stewardship Program, created in the 1990 Farm Bill, MDC staff help landowners prepare management plans that consider all the natural resources on the landowner's property. Missouri presently has 312,000 acres of land under stewardship plans, with more than 19,000 acres added just last year.

"MDC foresters assist thousands of landowners that are working to improve thousands of acres," says Lisa Allen, state forester. "Site visits and referrals to consultants through the Call Before You Cut program are all a major part of our work facilitating more than 100 timber sales annually, totaling more than 5 million board feet—enough to build about 200 average-sized homes. Department-led landowner workshops and other education programs also contributed to more than half of the forest management plans written by Missouri forest owners last year."

MDC's George O. White Nursery fosters a growing forest resource by distributing about 3.5 million seed-



**MDC helps landowners improve habitat on their land through both technical assistance and cost-share programs. Private land conservationist Jan Dellamano (right) speaks with landowner Ashley Williams about his quail habitat plan on his farm near Farmington.**





lings each year. MDC provides forestry assistance on more than 42,200 acres of private land and to more than 100 municipalities.

MDC also works with landowners to maintain and improve sport fish populations, aquatic biodiversity, and habitats. In 2011, MDC provided stream and lake management assistance including pond evaluations, streambank stabilization, and tree planting to more than 5,600 private landowners and distributed \$466,000 for stream protection and restoration work through the Stream Stewardship Trust Fund, made available by the Missouri Conservation Heritage Foundation.

“Missouri has tremendous aquatic resources and biodiversity, most of which is on private lands,” says Chris Vitello, MDC Fisheries Division chief. “To address this, the Department has selected 78 priority watersheds to focus its habitat and biodiversity efforts, selected for their conservation value, high likelihood of success, and the engagement of local stakeholders and partners.”

MDC partners with nongovernmental organizations such as Ducks Unlimited, Quail Unlimited, the National Wild Turkey Federation, Quail Forever and Pheasants Forever, and Quail and Upland Wildlife Federation, as

**MDC works with landowners to maintain and improve sport fish populations, aquatic biodiversity, and habitats. In 2011, MDC provided stream and lake management assistance including pond evaluations, streambank stabilization, and tree planting to more than 5,600 private landowners.**

well as other groups, to develop cost-share and other initiatives through matching agreements.

MDC’s agriculture liaison works directly with agriculture groups and agencies to foster communication and cooperation in the understanding of forest, fish, and wildlife issues as they relate to agriculture. “Communication is the key,” says Clint Dalbom, MDC agriculture liaison. “If we can understand each other, we can often work together.”

These efforts are important, since according to the 2007 Ag Census, 66 percent of Missouri was listed as “part of a farm,” including pasture, timber, or cropland.

“Good conservation and agricultural practices go hand in hand,” said Missouri’s Director of Agriculture Jon Hagler. “We encourage farm families to take advantage of the outstanding programs the Department

has available. Native plants and species, for example, are beneficial to farming operations and play an important role in helping Missouri farmers continue to be the most productive in the world.”

### WILDLIFE HABITAT, WATER QUALITY, AND SOIL HEALTH

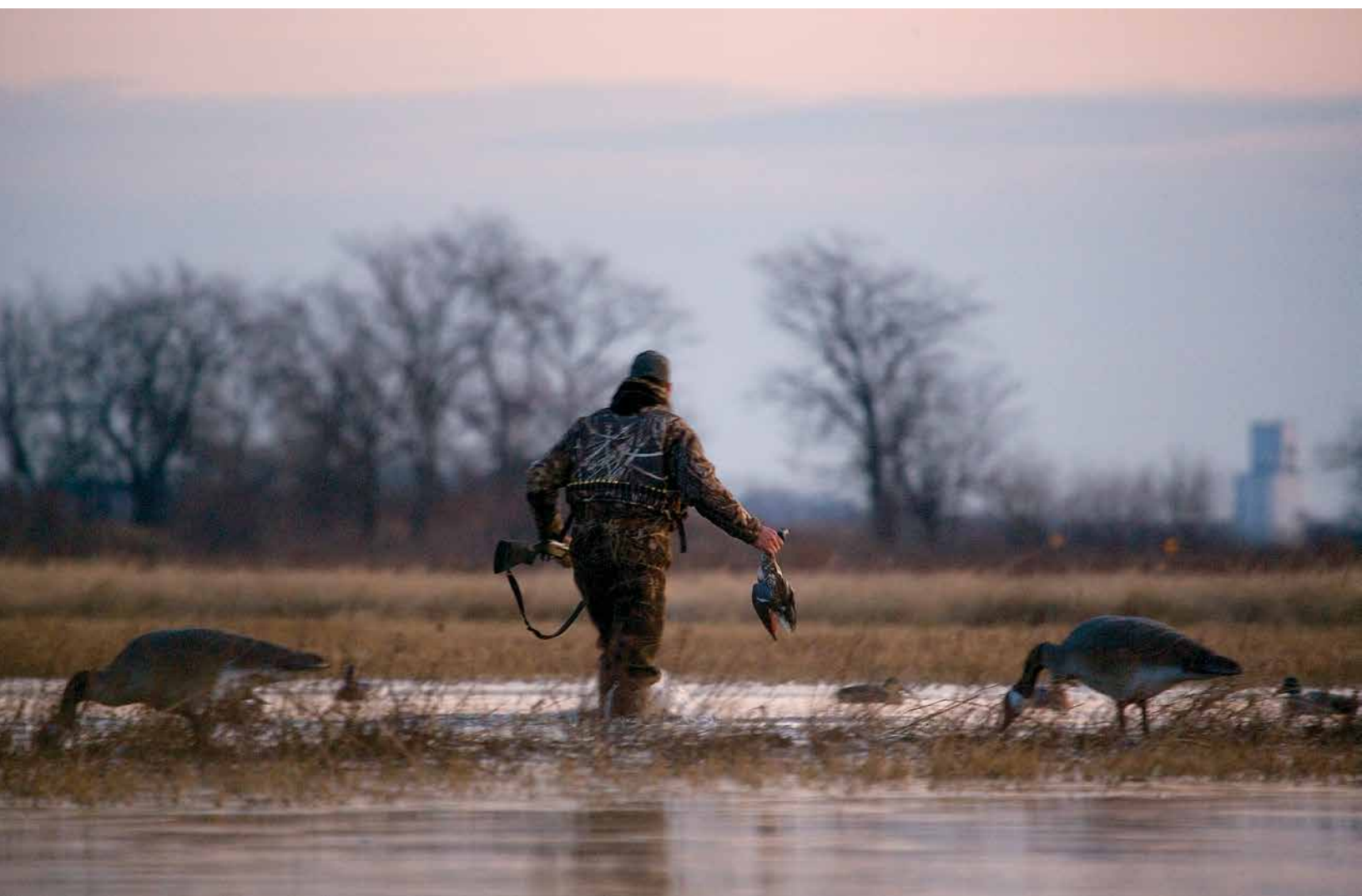
A number of agencies have joined forces to provide both technical and financial assistance to Missouri farmers and landowners. This partnership enhances and maintains wildlife habitat while simultaneously improving soil and water quality. Since 1981, the active partnerships between

**The Wetlands Reserve Program helps to remove from production cropland that experiences repeated flooding, expensive crop damage, and excessive soil erosion. The restored wetlands provide excellent fish nurseries when connected to the main channel, as well as wildlife habitat for ducks, geese, amphibians, and shorebirds.**

MDC, the USDA Natural Resources Conservation Service (NRCS), and the USDA Farm Service Agency (FSA) have helped Missouri’s landowners protect, restore, and enhance wildlife habitat in many ways, most significantly through the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP). Missouri is one of the top 10 states in the nation in acres of habitat conserved in both programs.

“Wildlife depends upon healthy soil and quality water, the same as people do,” says NRCS state conservationist J.R. Flores. “Our partnership with MDC provides the opportunity to work with Missouri landowners and show them that it is possible to enhance soil quality, water quality, and wildlife habitat on the same acres. For many years, Missouri has been a leader in the management of natural resources to benefit wildlife. Part of the reason is the willingness of federal and state agencies to work together for the common good.”

The Farm Bill’s CRP program provides multiple benefits to Missouri citizens. CRP allows landowners





## SHOW ME MORE QUAIL

Private landowners are the key to improving quail habitat. MDC works with tens of thousands of Missouri landowners to help them achieve their land-use objectives. About 17,000 of these landowners receive assistance with quail habitat.

In addition to technical assistance, such as habitat-management planning, MDC provides about \$500,000 in cost-share funds to private landowners that go directly to quail habitat needs annually. MDC also works with several partner organizations to help deliver an average of \$280,000 in matching funds directly for quail needs. MDC staff also helps private landowners apply for more than \$150 million in funds available through USDA Farm

Bill programs, such as the Conservation Reserve Program and Conservation Buffers for Upland Birds.

MDC supports more than 30 private-land quail focus areas, where we offer additional cost-share opportunities and services, such as loaner equipment to help create quail habitat. MDC also works with partner organizations, including Quail Unlimited, Quail and Upland Wildlife Federation, and Quail Forever and Pheasants Forever, on quail restoration. Members of several quail cooperatives help each other improve wildlife habitat and involve youth with habitat projects and wildlife education.

Visit MDC's More Quail blog at [mdc.mo.gov/node/8728](http://mdc.mo.gov/node/8728) and learn ways to improve quail habitat at [mdc.mo.gov/node/3678](http://mdc.mo.gov/node/3678).



Bobwhite quail

with highly erosive land to establish permanent vegetation, such as grass or trees. In return for temporarily taking the land out of production, the landowner is paid a certain amount per acre each year. Missouri currently has approximately 1.4 million acres enrolled in CRP. CRP has saved thousands of tons of soil from being lost through erosion and has improved water quality, improved soil health, and provided wildlife habitat.

WRP acreage in Missouri exceeds 140,000 acres, putting Missouri in the top five states for this Farm

Bill program. WRP helps to remove cropland from production that experiences repeated flooding, expensive crop damage, and excessive soil erosion. The restored wetlands benefit people throughout entire watersheds by enhancing water quality by naturally filtering and trapping nutrients, chemicals, and sediment. They also provide excellent fish nurseries when connected to the main channel, as well as wildlife habitat for ducks, geese, amphibians, and shorebirds.

The Farm Bill's Habitat Buffers for Upland Birds program provides excellent habitat for quail and other upland wildlife while helping farmers reduce herbicide use and expense on crop edges, where production is often poor. To date, Missouri has enrolled more than 34,000 acres of native-grass field borders along cropland edges. Landowners receive cost share for establishing vegetative cover and an annual rental payment.

"We have the third highest acreage of this practice in the nation, even though we have less grain crop acres than neighboring Midwest states," says Lisa Potter, MDC Farm Bill coordinator. "Nationwide, habitat buffers have proven beneficial to quail and several songbirds compared to crop fields without buffers. We are eager to measure those benefits in Missouri."

In 2008, the USDA Farm Service Agency introduced the State Acres for Wildlife Enhancement (SAFE) practice of the Conservation Reserve Program, which focuses on establishing habitat for quail, prairie chickens, and other declining wildlife. Similar to other CRP practices, participants may receive cost-share, incentives, and annual rental payments. In Missouri, SAFE has



**Since 2002, more than 10,000 acres of prairie, glade, savanna, and woodland have been restored through the Environmental Quality Incentives Program and the Wildlife Habitat Incentives Program on private land.**

enrolled 19,785 acres of quail, prairie chicken, and grassland bird habitat.

MDC also helps landowners benefit from two other popular federally funded programs, NRCS's Environmental Quality Incentives Program (EQIP) and its Wildlife Habitat Incentives Program (WHIP). Both programs provide technical assistance to implement glade, savanna, and woodland restoration projects, develop forest stewardship plans, and enhance quail habitat.

Since 2002, more than 10,000 acres of prairie, glade, savanna, and woodland have been restored through EQIP and WHIP on private land. Since 2008, more than \$11 million in cost share has been provided to Missouri landowners to improve forests and habitats for wildlife—almost \$3 million in cost share through EQIP and WHIP for forestry-related practices alone.

MDC has 57 full-time staff co-located in USDA service centers around the state to create a “one-stop” shop for landowners.

## SOIL, WATER, AND TEAMWORK

The Department also works hand in hand with the state's Soil and Water Conservation Districts (SWCDs) to help landowners manage and conserve the state's natural resources. Found in each of Missouri's 114 counties, these Districts provide financial incentives to

landowners to implement conservation practices that help prevent soil erosion and protect water resources.

The Department helps many SWCDs purchase and loan out specialized equipment to help landowners create wildlife habitat improvements, such as tree planters, root plows, native grass drills, and prescribed burn equipment. In turn, the SWCDs provide a means to loan the equipment to landowners and keep it in working order.

“We have a great partnership,” says Dalbom. “We organize educational workshops for landowners and bring together programs for school events. An SWCD will sponsor a prescribed burn workshop for MDC, and the Department will assist them with a Conservation Kids' Day in their county. Local Soil and Water Districts have also helped by signing landowners up for Department incentives that result in better wildlife habitat on the land. This long-standing partnership has made a lasting impact on the landowners and the landscape of Missouri.”

## PRESERVING OUR OUTDOOR HERITAGE AND ECONOMY

“In Missouri, all of the people own conservation. It's a partnership between all of us, and we all benefit from the rewards of it,” says White. “The success we've seen in Missouri speaks to the strong conservation foundation we've built and the continued commitment Missourians

## LANDOWNERS AND TRUST FUND BENEFIT STREAMS

Private landowner Gordon Clayton of Lawrence County used the Stream Stewardship Trust Fund to correct years of mismanagement along a stream on property he purchased in 2004. The stream, Cracker Neck Branch, had the lower two miles channelized years ago. This caused a headcut as the stream tried to regain its natural grade, lowering the streambed and creating raw, vertical streambanks with heights of 15 feet or more.

One of Clayton's first steps was removing livestock and planting trees on either side of the stream. Clayton worked with the Farm Service Agency and the Natural

Resources Conservation Service (NRCS) offices in Lawrence County and MDC to determine that grade control structures were needed to capture the headcut and return the stream's grade to a more natural state. These structures can be expensive. Fortunately the Missouri Conservation Heritage Foundation's Stream Stewardship Trust Fund was able to help fund this project.

Now that the structure is in place, Clayton is well underway to establishing more than 9 acres of riparian corridor and wetland buffers. With time and the added stability provided by the grade control structures, the streambank vegetation will flourish and the stream will become healthier. This project and others like it benefit adjacent landowners and local fisheries.

Clayton's project is one of many small success stories between private landowners, the Department, and other partners. Funding comes in part from the Stream Stewardship Trust Fund, overseen by the Missouri Conservation Heritage Foundation. The fund receives monies from developers, agencies, or individuals seeking a 404 permit from the U.S. Army Corps of Engineers, which enforces the Clean Water Act for required mitigation work. Those funds are used for stream projects that meet the Foundation's responsibility to restore, enhance, or preserve the stream resource.

The Missouri Conservation Heritage Foundation has allocated more than \$4.5 million from the Stream Stewardship Trust Fund to stream protection and improvement projects since the program began 12 years ago.





Upland sandpiper

have. MDC has worked out in the fields, with landowners throughout the state, for several generations now to strengthen and improve our lands to benefit both people and wildlife.”

Restoring wildlife habitat not only is pleasing to the eye but also benefits the economy of Missouri. The total economic impact of fish and wildlife recreation and the forest products industry in Missouri is \$11.5 billion dollars annually. This local activity helps to sustain the 95,000 Missouri jobs that are supported annually through forest, fish, and wildlife recreation.

### A COMMON CAUSE

Natural resource management is very complex and challenging. “The simple fact is that landscape changes—positive and negative—are related to how we all use the land,” says George Seek, retired MDC Private Land Services Division chief. “Soil, water, and wildlife conservation form an inextricably linked brotherhood—one cannot flourish without the others.

**The Farm Bill’s Habitat Buffers for Upland Birds program provides excellent habitat for quail and other upland wildlife while helping farmers reduce herbicide use and expense on crop edges, where production is often poor. To date, Missouri has enrolled more than 34,000 acres of native-grass field borders along cropland edges. Landowners receive cost share for establishing vegetative cover and an annual rental payment.**

The health and vitality of our natural resources provide the foundation for healthy and sustainable economies and the foundation for sustainable life. In the end, we’re doing exactly what Theodore Roosevelt defined as conservation, which was using common sense, for a common cause, for common good.” □

Learn more about MDC’s programs that benefit rural and urban landowners at [mdc.mo.gov/node/90](https://mdc.mo.gov/node/90).







# Conservation Education



# M

ANY OF US CAN STILL remember the teacher, friend, or family member who first inspired our love for the outdoors. It

often takes root in our hearts and our minds. Over time, it becomes a part of who we are and guides our actions.

Today, we enjoy a conservation legacy nurtured by many generations before us, who shared their love of the outdoors and made it a part of our heritage. The Department continues to work with Missourians, and for Missourians, to conserve the forests, fish, and wildlife of the state and preserve our outdoor heritage and quality of life.

Central to the Department's mission is making sure every Missourian has opportunities to learn about and enjoy nature. "We promote Missouri's passion for conservation through hands-on activities and education with people throughout the state," says MDC Outreach and Education Division Chief Mike Huffman.

"The Department helps educate and empower citizens in many ways: by offering outdoor programs to people of all ages at nature centers, by working with schools to teach top-notch curriculum that engages students in the outdoors, by sponsoring archery in schools, by coordinating the state's successful hunter education program, and by providing shooting ranges and conservation areas to enjoy," Huffman says.

"The Department also teaches outdoor skills and supports community conservation efforts in every county through agent outreach. A wide variety of publications, such as the *Missouri Conservationist*, our exciting new *Xplor* kids' magazine, a number of go-to nature guides, as well as the MDC website, also help connect Missourians with nature," says Huffman.

## NATURE CENTERS

Conservation education centers offer a huge range of programs touching on all aspects of the outdoors and conservation, from fishing workshops to presentations about wildlife and habitat. They are free and open year-round. Each year, the Department's nature centers connect almost a million people with the outdoors.

"At Burr Oak Woods Conservation Nature Center, we focus on helping people build the outdoor skills necessary to confidently explore the wild and beautiful



**Conservation nature centers offer a range of programs touching on all aspects of the outdoors and conservation, from fishing workshops to presentations about wildlife and habitat. They are free and open year-round.**

habitats of Missouri with their friends and family," says Lisa Lacombe, nature center manager.

Since Missourians passed the Design for Conservation sales tax in 1976, the Department has provided more outdoor education opportunities for citizens, including seven nature centers located around the state. Those nature centers are:

- Anita B. Gorman Discovery Center, Kansas City
- Burr Oak Woods Conservation Nature Center, Blue Springs
- Cape Girardeau Conservation Nature Center, Cape Girardeau
- Powder Valley Conservation Nature Center, Kirkwood
- Runge Conservation Nature Center, Jefferson City
- Springfield Conservation Nature Center, Springfield
- Twin Pines Conservation Education Center, Winona

Other Department facilities that offer opportunities to learn about and enjoy Missouri's diverse outdoors include the Columbia Bottom Conservation Area, August A. Busch Memorial Conservation Area, Northeast Regional Office, and the Shepherd of the Hills Fish Hatchery Conservation Center. Many other regional offices, conservation areas, and hatcheries also of-





MDC has developed free curriculum materials for grades K–12, called Discover Nature Schools. Along with free teacher training, student books, and teacher guides for each unit, the Department provides grants for exploration equipment, outdoor classroom materials, and field experiences.

fer exhibits. Find a nature center near you by visiting [mdc.mo.gov/node/4439](http://mdc.mo.gov/node/4439).

## DISCOVER NATURE SCHOOLS

Children are the key to Missouri’s conservation future. By working closely with the Missouri Department of Elementary and Secondary Education, MDC has developed free, widely adopted curriculum materials for grades kindergarten through 12, called Discover Nature Schools (DNS).

“Discover Nature Schools is a science and conservation education program at its best,” says Kevin Lohraff, the Department’s education programs and curriculum supervisor. “DNS is packed with exciting and engaging hands-on activities designed to bring students in grades K–12 outdoors and closer to nature.”



“DNS builds on kids’ natural inquisitiveness, giving them opportunities to get outdoors and closely observe the world around them,” Lohraff says. “Students learn to ask questions, form hypotheses, come up with ways to find answers, collect data, and find out if their hypotheses are right—all while recording observations, sketches, and reflections in their science notebooks. Kids learn science by becoming scientists, and they learn about nature while being in nature. This is the best way to learn—to learn by discovery.”



With DNS, students learn about Missouri plants, animals, their habitats, and how they all fit together. In becoming familiar with the outdoors just outside their classroom, students learn to value natural resources close to home.

DNS lessons are closely aligned with state education standards in science and biology. Activities involving recording, communicating, and presenting new information integrate with math and language-arts class work. The program began in 2006. By 2012, more than 78,000

**The Missouri National Archery in the Schools Program (MoNASP) was created to teach kids the basics of archery as a part of school curriculum for grades 4–12. The Department certifies teachers with the required Basic Archery Instructor training at no cost to the teacher. In partnership with the Conservation Federation of Missouri, it also offers \$500 grants to schools for equipment.**

Missouri children were connected with nature through various DNS instructional units and grants.

There are four units for various school-age groups. *Nature Unfolds* was developed for kindergarten through second grade. *Nature Unleashed—The Untamed World of Missouri Ponds, Forests, and Prairies* is for grades 3–5. Middle school students (grades 6–8) work with *Conserving Missouri's Aquatic Ecosystems*. *Nature Unbound—The Impact of Ecology on Missouri and the World* was developed for high school students.

Funding for *Conserving Missouri's Aquatic Ecosystems* comes in part from the Federal Aid in Sportfish Restoration Program, which distributes some fishing-related taxes toward sportfish conservation and education.

Along with free teacher training, student books, and teacher guides for each unit, the Department provides grants for exploration equipment, outdoor classroom materials, and field experiences. Conservation grants supporting Discover Nature Schools totaled \$268,909 in 2011. Learn more at [mdc.mo.gov/node/9019](http://mdc.mo.gov/node/9019).





## AGENT EDUCATORS

Conservation agents provide law-enforcement services to the public for protection and conservation of Missouri's forests, fish, and wildlife, as well as for safe and proper public uses of conservation areas. Conservation agents also provide conservation education in a broad range of settings:

- » Prepare radio and television programs, newspaper articles, and meet with civic groups, schools, church groups, and a wide variety of other organizations
- » Help administer the Department's Hunter Education Program, along with volunteer instructors and other MDC staff
- » Provide habitat-planning information and food-plot seed to landowners

» Coordinate and support the Conservation Federation of Missouri's Share the Harvest program, providing a way for hunters to donate deer meat to those in need

» Help stop poaching through the Operation Game Thief/Forest Arson hotline, which allows citizens to anonymously report poaching and forest arson

» Support programs such as Missouri's National Archery in the Schools, Discover Nature Girls Camps, and take conservation on the road with both a cooking trailer to teach high school students the tastier side of hunting and fishing and a trailer equipped to teach students about trapping

» Partner with organizations and businesses,



in programs such as the Juniors Acquiring Knowledge, Ethics, and Sportsmanship (JAKES) Program sponsored by the National Wild Turkey Federation; Ducks Unlimited groups and their Green Wings Program; and the Wonders of the Ozarks Learning Facility (WOLF), a partnership between the Springfield Public Schools and Bass Pro Shops.

## ARCHERY IN THE SCHOOLS

The Missouri National Archery in the Schools Program (MoNASP) was created to teach kids the basics of archery as a part of school curriculum for grades 4–12. The program, part of the National Archery in the Schools Program (NASP), began in Missouri in 2007. Today, more than 38,000 Missouri students from 227 schools participate in MoNASP. The 2012 state tournament drew more than 1,150 competitors from 55 schools.

Students of all sizes and abilities learn archery together, and at competitions boys and girls are at the shooting line together. “You don’t have to be athletic, fast, big, or strong to be good at archery,” says NASP’s co-founder Roy Grimes.

When teacher Tracy Flood heard about the archery program, she knew it would be a good fit for her outdoor education class. Flood, a teacher at Crane Middle School, now has a waiting list of kids who want to take her class. “Archery is the most popular class in middle school. Once they’re hooked, they’re hooked. Kids want to shoot, so they make sure they keep their grades up.”

“Kids love archery, and archery helps kids excel,” says the Department’s MoNASP Coordinator Eric Edwards. “Statistics show that school archery programs improve school attendance, increase participants’ self-confidence and physical activity, they can better relate to what they are learning, it appeals to a great variety of students, it gets kids outdoors to discover nature, and for many, it can become an after-school activity.”

Communities are seeing the archery program as a great investment in their future. Local sporting clubs,

conservation groups, and civic organizations often donate archery equipment to schools, volunteer to help support after-school archery clubs, and organize local competitions. In Missouri, the National Wild Turkey Federation, Whitetails Unlimited, Pheasants Forever, Quality Deer Management Association, Bass Pro Shops, and the Friends of National Rifle Association are just a few of the groups that have donated equipment or funds to support schools.

“Success breeds success,” says Conservation Commissioner Don Johnson, who helped bring the archery program to Missouri. “Once kids succeed in archery, they find they can succeed in other parts of their lives.”

The Department certifies teachers with the required Basic Archery Instructor training at no cost to the teacher. In partnership with the Conservation Federation of Missouri, it also offers \$500 grants to schools for equipment. Learn more at [mdc.mo.gov/node/3813](http://mdc.mo.gov/node/3813).

## HUNTER EDUCATION

Missouri’s Hunter Education Program offers many benefits to Missourians. “This safety program produces individuals who are responsible, knowledgeable, safe, and involved in the outdoors,” says MDC State Hunter Education and Range Coordinator Tony Legg.

More than 1,600 volunteer and staff instructors provide training and certification through traditional classroom hunter education classes and through a combination online and field day course.

“The Missouri Hunter Education program is a prime example of government and volunteers working

successfully together to save lives, promote conservation, and keep the hunting heritage alive for generations to come,” says James Robertson, president of the Missouri Hunter Education Instructors Association, and volunteer instructor since 1991.

Missouri’s first formal hunter safety training was created in 1957 as a voluntary course. The Department’s official statewide range program began in 1972 with the passage of the Dingell-Hart Excise Bill, amendment to the Pittman-Robertson Act of 1937, which provided funds for hunter education and target range development from excise taxes on handguns and archery equipment. Now known as the Federal Aid in Wildlife Restoration Program, this federal funding continues to support Missouri’s hunter education program.

In 1987, Missouri approved a mandatory hunter education requirement for all hunters during the firearms seasons beginning in 1988, for anyone born on or after January 1, 1967. This regulation marked the beginning of a new era in Missouri’s Hunter Education Program. To date, more than 1.1 million Missourians have completed the course. Due to the success of the program, Missouri’s model has become a standard-bearer and has been widely adopted by many other states.

Mandatory hunter education has dramatically decreased and prevented many injuries and deaths. The



**The Department supports 1,200 Missouri Master Naturalists in 12 chapters, who provide more than 48,000 hours of volunteer service to habitat restoration and conservation efforts each year.**

number of hunting incidents began dropping dramatically in 1992—when any hunter under the age of 26 would have attended a hunter education course—and have declined steadily since.

The Department also offers free bowhunter education courses and a free, 15-minute online tree-stand safety course. Learn more at [mdc.mo.gov/node/3095](http://mdc.mo.gov/node/3095).

## VOLUNTEERS VITAL FOR SUCCESS

**T**he Department partners with tens of thousands of individuals to improve Missouri’s forests, fish, and wildlife.

“Volunteers are the lifeblood of conservation in Missouri,” says Syd Hime, MDC volunteer and interpretive programs coordinator. “Thousands of volunteers provide tens of thousands of hours of volunteer service at our hatcheries, nature centers, offices, and shooting ranges each year. Their passion and enthusiasm are contagious, and Missouri is a better place for it.”

Most volunteers contribute in one of these areas:

» Hunter education: Approximately 1,400 volunteers donated more than 34,000 hours

in 2011 as primary instructors for Missouri’s mandatory Hunter Education Certification and voluntary Bowhunter Education Certification courses.

» Staffed ranges: About 160 people donated more than 12,500 hours in 2011 offering primary support for public firing line safety, shooting, and hunting related programs.

» Nature centers: More than 450 volunteers at hatcheries and nature and interpretive centers throughout the state donated more than 48,500 hours in 2011. Volunteers develop and conduct programs, work with school groups, lead hikes, assist with area management, and more.

» Master Naturalists: 1,200 Missouri Master Naturalists in 12 chapters provided more than 48,750 hours of volunteer service to

habitat restoration and conservation efforts each year.

» Forest Keepers: More than 2,500 Forest Keepers volunteer almost 18,000 hours observing and reporting on the condition of rural and community forests.

» Stream Teams: More than 3,800 active Stream Teams improve and protect their adopted stream of choice. Teams perform dozens of activities like litter pickup, water quality monitoring, tree planting, and storm drain stenciling. In 2011, volunteers contributed more than 145,000 hours to our state’s stream resources.

The Department has many other volunteer opportunities to explore. If you’re interested in playing a role in keeping Missouri’s nature green, clean, and healthy, learn more at [mdc.mo.gov/node/4668](http://mdc.mo.gov/node/4668).





## SHOOTING RANGES AND OUTDOOR SKILLS

Your outdoor recreation can be safer and more satisfying if you increase your knowledge and hone your skills. The Department operates five staffed shooting ranges and outdoor education centers designed to improve outdoor skills and develop safer hunters.

These facilities are located in Platte, Jackson, Greene, Jefferson, and St. Charles counties. They offer target shooting, as well as numerous outdoor skills programs, such as archery, map and compass reading, and wildlife identification. The Department also has more than 70 unstaffed ranges. Check for upcoming events at shooting ranges and outdoor education centers at [mdc.mo.gov/node/6209](http://mdc.mo.gov/node/6209).

## CITIZEN-LED CONSERVATION EDUCATION

Educating and involving future generations in the excitement of outdoor recreation and conservation opportunities involves the efforts of many partners. Any attempt to list them all could never be complete—but would include Missourians who volunteer their time and expertise to a variety of Department programs (see previous page), the National FFA Organization, the 4-H Youth Development Program, Ducks Unlimited's Green Wings, AmeriCorps volunteers, National Wild Turkey Federation, Conservation Federation of Missouri's Conservation Leadership Corps, and a

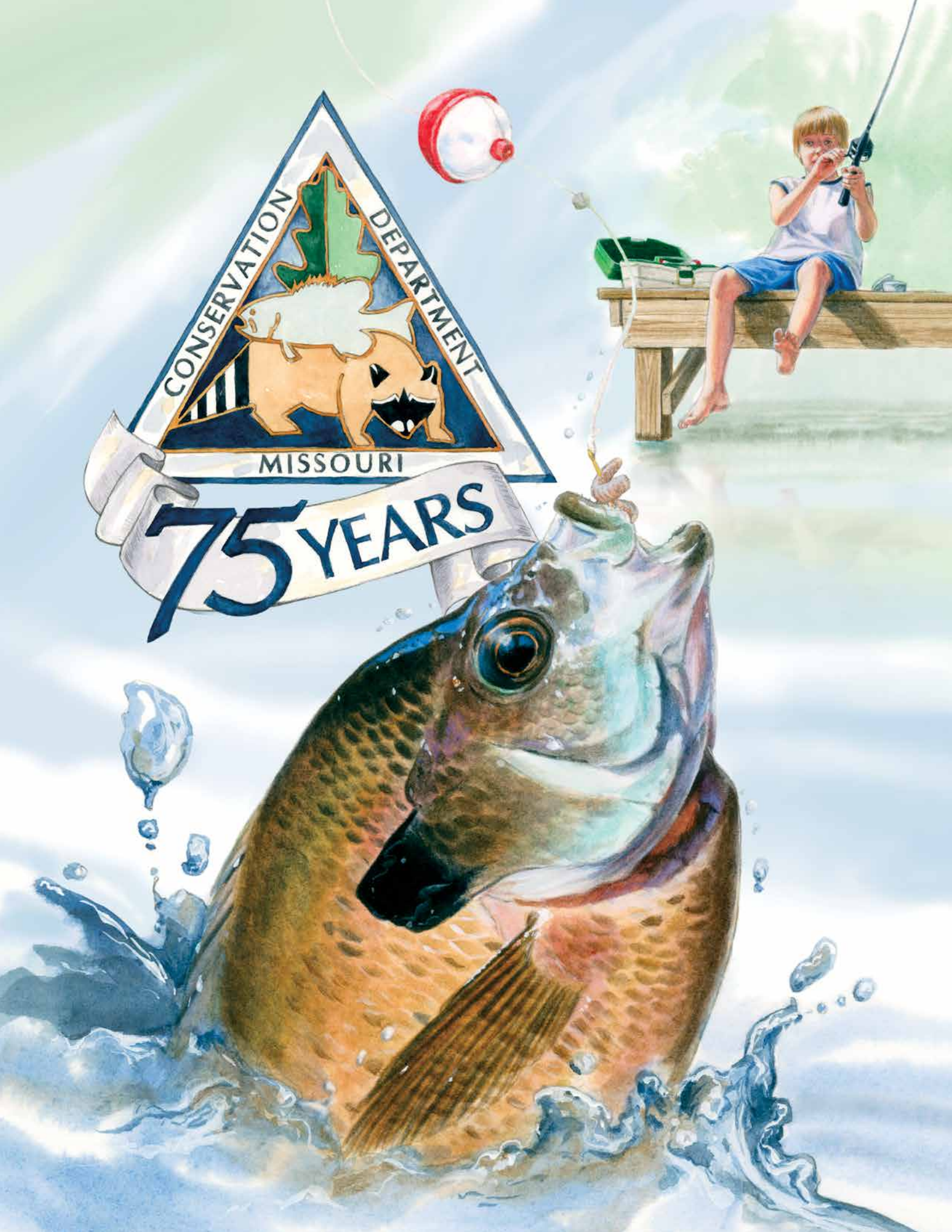
**In 1987, Missouri approved a mandatory hunter education requirement for all hunters during the firearms seasons beginning in 1988, for anyone born on or after January 1, 1967. This regulation marked the beginning of a new era in Missouri's Hunter Education Program. To date, more than 1.1 million Missourians have completed the course.**

variety of important state and nationwide hunting and fishing organizations.

"Regardless of the organization, all of these individuals share a common bond, which is that they each donate an incredible amount of time and energy to share their love of the outdoors and to help preserve our outdoor heritage," says Tim Ripperger, MDC deputy director.

For the past 75 years, education has been a major focus of the Department. "Part of our mission is to provide the opportunity for all citizens to use, enjoy, and learn about the forest, fish, and wildlife resources of the state," says MDC Director Robert L. Ziehmer. "It's a partnership with Missourians, and for Missourians. It is gratifying to see so many Missourians sharing their love of the outdoors by teaching and mentoring tomorrow's conservation leaders. The work we do today sows the seeds for a stronger connection to the land and the outdoors tomorrow." □







# The Promise Continues



“W

HAT’S PAST,” WILLIAM Shakespeare famously wrote in *The Tempest*, “is prologue.” Shakespeare was right—what’s past is but a prelude of more important things to come. The Department’s 75th anniversary

is a fitting time for Missourians to reflect on more than seven decades of successful citizen-led conservation efforts. The hard work of multiple generations has brought back a number of fish and wildlife species to abundance; restored healthy forests; greatly improved access to hunting, fishing, and other outdoor recreational opportunities; and created a Department that is a national leader in forest, fish, and wildlife conservation.

## THE SPIRIT OF CONSERVATION

Missouri citizens have taken unique and proactive steps to support and enhance conservation. What we now consider “business as usual” was quite groundbreaking in its early days. Back in 1936, Missourians rallied to create a Conservation Commission through a state constitutional amendment. This gave Missouri the nation’s first apolitical, citizen-led, conservation agency with a management approach based on technical research. Then in 1976, citizens voted again to dedicate funding for the long-term work of conservation through a one-eighth of 1 percent sales tax, known as the Design for Conservation.

“These were truly visionary concepts,” says MDC Director Robert L. Ziehmer. “Thankfully, these citizen-led actions created a solid foundation for conservation. We continue to reap many benefits from abundant forest, fish, and wildlife resources today.”

Despite the numerous conservation successes that can be credited to Missouri’s citizen-led conservation model, many of the same challenges that faced early conservationists decades ago persist today. Citizen involvement remains vital to ensure that healthy lands and waters continue to support the complex web of life in an ever-changing environment. But the future is bright. The Show-Me State is uniquely poised to lead in a future that will be full of new opportunities and challenges.

## SCIENCE-BASED CONSERVATION

Missourians will face new conservation issues and trends head-on with the Department’s time-tested,



**A strong conservation ethic in the next generation is key for conservation to continue to work in Missouri.**

science-based approach to conservation coupled with active resource management. One common theme in forest, fish, and wildlife management is “change is the only constant.” Just as an unkempt field may eventually become choked with weeds, so too might a prairie ultimately grow up in saplings; a forest suffer from diminished habitat diversity; and altered waterways fail to meet the spawning and brood-rearing needs of fish and other aquatic organisms.

The Department’s active resource management of the state’s more than 900 conservation areas and the numerous technical and cost-share programs available to private landowners are all ways for the Department to continue evolving the science of conservation in real-time, as new methods and approaches to forest, fish, and wildlife management are refined.

“Future conservation success will only be as good as the information we use to make our management decisions,” says Dennis Figg, MDC wildlife programs supervisor. “Good conservation is a result of both science-based information and citizen participation. As the human population grows, the Missouri landscape continues to change and the challenge of sustaining fish and wildlife is increasingly difficult. Science-based conservation



## THE FOUNDATION OF MISSOURI'S ECONOMY AND QUALITY OF LIFE

**Conservation Pays in Missouri.** Each year, fish and wildlife recreation and the forest products industry contribute more than \$11.4 billion to Missouri's economy.

**Conservation Pays Its Way.** Forest, fish, and wildlife recreation spending generates more than \$439 million annually of state and local tax revenue. The amount of state sales tax revenue generated from fish and wildlife recreation and the forest products industry is about the same as the sales tax revenue received by MDC from the conservation sales tax. For every \$8 spent on taxable items, one penny goes to conservation. The Department's budget is less than 1 percent of the total state budget and the Department receives no state general revenue.

**Conservation Pays for Jobs.** Fish and wildlife recreation and the forest products industry support more than 95,000 Missouri jobs.

continues to benefit the state's forest, fish, and wildlife resources through the continued involvement of the public, landowners, and our partners."

### A CHANGING MISSOURI

When the Department began in 1937, the state's population was mostly rural. Now, the majority of Missourians live in cities and suburbs. As many of today's Missourians become more removed from the seasonal harvesting of food and fuel from the outdoors, conservation can take on a different meaning for them. This demographic shift presents a tremendous opportunity for Missourians to improve their local forest, fish, and wildlife resources at the community level. MDC provides information, technical support, funding, and recognition programs to help Missouri's communities learn about and conserve wildlife habitat and enjoy the benefits of "green infrastructure." For more information on community conservation opportunities, visit [mdc.mo.gov/node/3118](http://mdc.mo.gov/node/3118).

To keep Missourians connected to the outdoors, the Department provides close-to-home outdoor experiences at nature centers, conservation areas, shooting ranges, and through outdoor skills programs. For more information on MDC facilities and Discover Nature programs, visit [mdc.mo.gov/node/3116](http://mdc.mo.gov/node/3116).

The changing face of Missouri's rural landowners also marks a turning point for Missouri's forests, fish, and wildlife. "Many of Missouri's landowners will be transferring management or ownership of their property to a younger generation in the next decade," says MDC

*Conservation makes Missouri a great place to live, work, hunt, fish, and enjoy the outdoors.*

**Conservation Makes Missouri a Great Place to Hunt, Fish, and Enjoy Nature.** Missouri is known for world-class outdoor adventures. More than one-quarter of tourism dollars in Missouri are spent on forest, fish, and wildlife recreation. More than 600,000 people hunt in Missouri, 1.1 million people fish, and 2.2 million people view, feed, or photograph wildlife. They spend more than \$3 billion each year in Missouri.

**Conservation Preserves Missouri's Outdoor Heritage.** Missouri is ranked first in the nation for hunter recruitment. For every 100 hunters that stop hunting, 116 take up hunting. Missouri is ranked fifth in the nation for the number of resident hunters and eighth in the nation for the number of resident anglers.



**Shannon County landowner Ron Graef discusses timber stand improvement with Private Land Conservationist Mike Gaskins. Because more than 90 percent of Missouri is privately owned, ultimately the success of conservation rests on strengthening the partnership between landowners and the Department.**

Deputy Director Tom Draper. "A strong conservation ethic in this younger generation of landowners is the key for conservation to continue to work in Missouri."

Because more than 90 percent of Missouri is privately owned, ultimately the success of conservation depends on the strong partnerships between citizens, landowners, and the Department. The Department partners with numerous state and federal agencies and conservation groups to provide technical and financial assistance to landowners interested in improving habitat on their farms. Each year, the Department provides

timely and responsive service to more than 70,000 urban and rural landowners, including more than 6,000 on-the-farm visits to help landowners achieve their natural resource goals—often in cooperation with their neighbors.

“We’re seeing an increase in cooperative landscape-scale conservation, where landowners are working with the Department and other agencies to implement wildlife habitat work over hundreds, if not thousands, of contiguous acres,” says Bill White, MDC private land services field chief. “You have a much better chance of success when you reach across the fence and come to an understanding with your neighbor about developing these ‘wild acres’ together with shared resources.”

Many of these cooperatives are united by a common goal, whether it is to manage for more quail, deer, turkey or elk or to help bring back species on the brink, such as the prairie chicken.

“Landowners working together to improve habitat for quail or turkey also benefit a whole suite of other wildlife species. For example, grassland habitat for prairie chickens also provides much needed habitat for grassland songbirds, rabbits, and quail,” White says.

Many other species, in a variety of habitats, also stand to benefit from landscape-scale and watershed conservation partnerships currently being formed throughout the state. These large-scale efforts to improve and conserve functioning habitats ultimately benefit the greatest number of fish and wildlife species possible. Contact your local MDC private land conservationist for information about incentives and cost-share programs, and to schedule a visit to evaluate and enhance wildlife habitat on your property. Find your contact at [mdc.mo.gov/node/19935](http://mdc.mo.gov/node/19935) or call your regional office.

## FUTURE CONSERVATION CHALLENGES

When one surveys the state’s abundant populations of small mammals, turkeys, and deer or hears that migratory waterfowl numbers are up, it almost invites a sense of congratulatory complacency because the hard work of restoration appears to be complete. Yet, for every restoration success story, there are other wildlife and fish species still struggling to rebound.

The Department remains dedicated to ensuring that healthy habitats and waterways continue to benefit all plant and animal species. “Challenges to conservation have not disappeared. The next 75 years promise to be



more challenging than the last 75 years,” says Draper. “Management of plant and animal diseases, allocation of water resources, and growing human populations that demand much from natural resources are just a few of the challenges we will face.”

Other future challenges include balancing the needs of both abundant and rare wildlife, degradation of our stream systems, habitat loss and fragmentation, and increased urbanization. One of the greatest trials will be managing aggressive, nonnative invasive species of insects, aquatic organisms, and plants.

Invasive plants such as garlic mustard, Japanese honeysuckle, Japanese hop, purple loosestrife, sericea lespedeza, spotted knapweed, and many others are displacing native plants, causing agricultural damage, and reducing the biological diversity of Missouri’s outdoors.

“Successful control depends on prevention, early detection, and rapid response,” says Draper. “Invasives can proliferate fairly quickly. Taking precautions to keep invasive plants from spreading is the best way to prevent them from establishing on your property.”

MDC has developed a series of fact sheets to help landowners identify and control several of the most





**ABOVE:** For every restoration success story, there are other wildlife and fish species still struggling to rebound.

**LEFT:** Spring River at Robert E. Talbot CA near Mt. Vernon. The Department actively manages more than 900 conservation areas and continues to refine forest, fish, and wildlife management.

invasive plant species that degrade their pastures and choke out native plants that have more nutritional value for domestic animals and wildlife. Download these fact sheets and learn more about invasive species prevention and control at [mdc.mo.gov/node/4086](http://mdc.mo.gov/node/4086).

Aquatic invasives such as zebra mussels, rusty crayfish, didymo, and Asian carp challenge the health of Missouri's waterways. Learn how to prevent their spread at [mdc.mo.gov/node/13536](http://mdc.mo.gov/node/13536).

## THE PROMISE CONTINUES

There is a challenge in conserving Missouri's forest, fish, and wildlife resources—a challenge that each generation has to choose to accept and ultimately lead. We owe it to those who came before us and, more important, to future generations. The Department remains committed to working with Missourians, and for Missourians, to achieve even more forest, fish, and wildlife conservation success.

"Today, Missouri is known for world-class outdoor opportunities, and this is not by accident," says Ziehmer. "Citizens in the state of Missouri have a passion for the outdoors like no other state across the nation. They took

it upon themselves—they implemented steps that, today, place us as a national leader. I would encourage citizens to pause as we celebrate 75 years of conservation in the state and just reflect back, to recognize the success of conservation. It's easy to see."

Missouri's natural resources, economic conditions, and the needs and desires of its citizens are all changing. Looking forward, the Department will focus on five areas of responsibility:

- Ensure healthy and sustainable forest, fish, and wildlife resources throughout the state.
- Manage lands held in public trust and associated infrastructure to ensure continued benefit to citizens and to forest, fish, and wildlife resources.
- Provide opportunities for active citizen involvement in programs and services, and conservation education in both rural and urban areas.
- Engage partners at the individual, community, county, state, and federal levels to enhance natural resources and effective delivery of conservation services.
- Ensure sound financial accountability and transparency in all areas of operation.

"Our state's conservation success depends on continued citizen support," Ziehmer says. "The Department must cultivate citizen interest, support, and trust."



## THE FUTURE OF CONSERVATION IS YOU

The future of Missouri's outdoors begins with a question: What do you want the future to look like?

"The future will be what Missourians want it to be—what citizens, landowners, and the Department invest in now creates that future," says Conservation Commission Chair Don Bedell. "All you have to do is look back and see the great conservation successes we have created together. Citizen input and participation has and will continue to play an important role in advancing our conservation legacy."

The most significant thing we can do to ensure a bright future for conservation is to provide all Missourians with the opportunity to learn about and understand our natural world. Only then will the next generation be prepared to face tomorrow's conservation challenges. Experience tells us that this effort starts with individuals, spreads to communities, and eventually influences society's decision-making.

"Mentoring is one of the most effective ways to pass on an interest in the outdoors," says Ziehmer. "The Department will continue to emphasize the importance of mentoring through a variety of programs. The Department has also developed educational units so that students can better understand the connections between conserving Missouri's forests, fish, and wildlife, and the quality of their own lives."

Recruitment, retention, and education of hunters and anglers, as well as other outdoors enthusiasts, are

critical for future wildlife management. "We are fortunate in Missouri to have one of the highest hunter and angler recruitment rates in the nation. That is a result of the actions of our citizens and conservation leaders," says MDC Deputy Director Tim Ripperger. "Citizens and the Department have created a state like no other that encourages family participation in outdoor sports and time-honored traditions through dedicated funding, ease to begin hunting at a minimum of 6 years of age, low-priced permits, and continual habitat work."

You can help connect other Missourians to the outdoors. Explore volunteer conservation, education, and mentoring opportunities at [mdc.mo.gov/node/4668](http://mdc.mo.gov/node/4668), and visit:

Stream Teams: [mostreamteam.org](http://mostreamteam.org)

Forestkeepers: [forestkeepers.org](http://forestkeepers.org)

Hunter Education: [mdc.mo.gov/node/3722](http://mdc.mo.gov/node/3722)

Nature and Interpretive Centers: [mdc.mo.gov/node/4439](http://mdc.mo.gov/node/4439)

Discover Nature Schools: [mdc.mo.gov/node/9019](http://mdc.mo.gov/node/9019)

The challenges to continuing Missouri's conservation legacy are great, the rewards even greater. Together, Missourians and the Department will continue to build on our conservation inheritance and share our outdoor heritage with new generations. This is the ultimate way to deepen our connection to the land, forests, and waterways of the state and forge a brighter future for the outdoors and for ourselves. □



# The Economics of Conservation



Conservation enriches our economy and quality of life

# We Listen to Missourians

The Missouri Department of Conservation believes that all Missouri citizens are important and we want to listen and act to earn their trust. Our job is to listen, understand, and personally deliver programs and services in a manner that benefits all Missourians and the forest, fish, and wildlife resources in Missouri.



- The Conservation Commission meets regularly and anyone may contact the Conservation Commission with comments or request to appear at a Commission meeting.
- The director of the Conservation Department may be personally contacted at Department headquarters in Jefferson City, by telephone or email.
- The Department ombudsman works with citizens to resolve conflicts and answers a wide variety of questions by mail, telephone, and email.
- The Department conducts a wide variety of statistically accountable mail surveys, telephone surveys, and focus groups to determine the opinions and attitudes of Missourians about conservation and the Department of Conservation. The Department has conducted attitude, opinion, satisfaction, and participation surveys for more than 30 years.
- The Department has eight regional service centers with staff available to assist Missourians with their conservation requests and needs.
- The Department's monthly magazine, free to Missourians who request it, includes a "Letter to the Editor" section and an "Ask the Ombudsman" column.
- The Department maintains an extensive website with conservation information, contact information, and online comment forms.
- The Department conducts frequent public forums to obtain interactive feedback from all Missourians at locations throughout the state.
- Department regulations are formed and discussed in a public setting that invites citizen participation.
- The Department seeks public input on proposed regulations through a variety of venues including the Department's regulation comment page at [mdc.mo.gov/node/19209](http://mdc.mo.gov/node/19209).



# What Missourians Say about Conservation

The majority of Missourians feel the Department of Conservation is doing an excellent or good job of providing services to themselves (73 percent), their families (71 percent), the community (69 percent), and the state (71 percent). Most Missourians say they are either very familiar (22 percent) or somewhat familiar (60 percent) with the Missouri Department of Conservation.



- Most Missourians (91 percent) report they are interested in Missouri's forests, fish, and wildlife.
- Most Missourians (75 percent) agree that land should be acquired for forest, fish, and wildlife conservation.
- Most Missourians (91 percent) agree that "It is important for outdoor places to be protected even if you don't plan to visit the area."
- Most Missourians (79 percent) agree that the Department of Conservation should make an effort to restore animals that once lived or are currently very rare in the state.
- Most Missourians (80 percent) agree that the Department of Conservation should help private landowners who want to restore native communities of plants and animals.
- More than three-quarters (78 percent) agree that the Department "should assist communities that want to include trees and green spaces in housing, business, and shopping developments."
- Almost all Missourians (95 percent) approve of hunting for food.
- Two-thirds of Missourians (67 percent) approve of cutting down trees to make lumber, furniture, or other wood products.
- The majority of Missourians (66 percent) agree that trapping is okay as long as it is regulated.
- Time is mentioned as the biggest obstacle to the enjoyment of outdoor activities by Missourians.
- A majority of Missourians (78 percent) agree that the Department of Conservation is doing a good job of enforcing fish and wildlife laws.
- Most Missourians (85 percent) agree that the Missouri Department of Conservation "is a name I can trust."

Information from the Missouri Department of Conservation, 2009.

# The Economics of Conservation in Missouri

The amount of state sales tax revenue generated from forest, fish, and wildlife recreation spending is about the same amount of sales tax revenue received by the Department of Conservation from the one-eighth of 1 percent Conservation Sales Tax—

## CONSERVATION PAYS ITS WAY IN MISSOURI.



- In Missouri, the total economic impact of fish and wildlife recreation and the forest products industry is \$11.4 billion dollars annually.
- Since 1980, the Department has paid nearly \$16 million dollars to Missouri counties in lieu of taxes. In fiscal year 2012, more than \$1.47 million was paid to Missouri counties for forest cropland payments, levee and drainage district payments, in-lieu-of-property-tax payments, and county aid road trust payments.
- The forestry and wood products industry in Missouri generates more than \$5.7 billion dollars annually and supports 31,700 jobs.
- Missourians and nonresidents spend more than \$3.3 billion dollars annually related to forest, fish, and wildlife recreation. These expenditures generate \$5.7 billion dollars annually in economic impacts in Missouri.
- The annual expenditures related to forest, fish, and wildlife recreation support 64,186 jobs in Missouri.
- Forest, fish, and wildlife expenditures generate more than \$439 million dollars annually in state and local tax revenue.
- In Missouri, 2.9 million residents and nonresidents, age 16 years and older, participate in fishing, hunting, or wildlife-associated recreation.
- Collectively, resident anglers spend 15.3 million days afield, resident hunters 9.2 million, and resident wildlife-watchers 13.4 million days in away-from-home activities in Missouri. Nonresident anglers add 1.3 million days and nonresident hunters 544,000 days annually.
- Nonresident expenditures for fishing and hunting in Missouri exceed \$211 million each year. Each non-resident angler and hunter spends an average of \$617 dollars each year in Missouri.
- Deer hunters in Missouri, age 16 years and older, spend \$690 million each year.
- Deer hunting in Missouri generates \$1.1 billion dollars of business activity annually. This results in \$83 million in state and local tax revenue each year.
- Deer hunting expenditures annually support more than 11,824 jobs in Missouri.

Information from the Missouri Department of Conservation, the Missouri Forest Products Association, and the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.



# Missouri Hunting and Fishing

Hunters	608,000
Anglers	1.1 million
Total Expenditures	\$2.4 billion
Total Jobs Supported	45,939
Earnings from Expenditures	\$1.2 billion
State and Local Tax Revenue	\$269 million
Total Business-Generated Revenue	\$4.2 billion



## STATE TAX REVENUE INFORMATION

Hunters and anglers in Missouri generate \$269 million annually in state and local taxes.

## TAKE A CLOSER LOOK

- More Missourians hunt or fish than the number who attend St. Louis Rams or Kansas City Chiefs games.
- One of every four Missouri residents hunts or fishes.
- Annual spending by hunters and anglers is more than the cash receipts for cattle production in Missouri.

## JOBS

Hunters and anglers support 45,939 jobs each year.

- The amount of sales tax revenue generated by forest, fish, and wildlife recreation is about the same amount of sales tax received by the Department of Conservation from the one-eighth of 1 percent sales tax—in other words, conservation pays its way in Missouri.

Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

# Missouri Forestry and Wood Products

Total Forested Acres	14 million
Privately Owned Acres	83 percent
Publicly Owned Acres	15 percent
Wood-Using Industry Dollars	\$5.7 billion
Total Jobs Supported	31,700
Wood-Using Industry Labor Income	\$1.2 billion



## STATE TAX REVENUE INFORMATION

Forestry and the wood-using industries in Missouri generate \$57 million each year in state sales tax.

## TAKE A CLOSER LOOK

- Each year, about six million tree seedlings are planted.
- More than 1.4 million acres of forests have been added to Missouri's landscape in the last 20 years.
- Forests in Missouri are increasing faster than they are being harvested.
- Most of the forests in Missouri are privately owned.

## JOBS

Wood industry firms and activities support more than 31,700 jobs each year.

- Forests are important to Missourians who enjoy outdoor recreation such as camping, sightseeing, bird watching, canoeing, photographing nature, hunting, or fishing. Many Department of Conservation areas have campsites or are open for primitive camping.
- Forests in Missouri are essential for healthy streams, clean water, wildlife habitat, and environmental stability.

Information from the Missouri Department of Conservation and the Missouri Forest Products Association.

## CONSERVATION PAYS ITS WAY IN MISSOURI



# Missouri Wildlife Recreation

Wildlife Watchers	2.2 million
Total Expenditures	\$869 million
Total Jobs Supported	18,247
Earnings from Expenditures	\$493 million
State and Local Tax Revenue	\$113 million
Total Business-Generated Revenue	\$1.5 billion



## STATE TAX REVENUE INFORMATION

Wildlife watchers in Missouri generate \$113 million annually in state and local taxes.

## TAKE A CLOSER LOOK

- In Missouri, adults involved in wildlife watching would fill Arrowhead Stadium in Kansas City more than 28 times.
- Missourians are outdoor oriented—each year they spend 13.4 million days in wildlife-watching activities away from their home. Two million enjoy observing, feeding, and photographing wildlife near their homes.

## JOBS

Wildlife watching activities in Missouri support 18,247 jobs each year.

- The amount of sales tax revenue generated by forest, fish, and wildlife recreation is about the same amount of sales tax received by the Department of Conservation from the one-eighth of 1 percent sales tax—in other words, conservation pays its way in Missouri.

Information from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.





# Conservation Department Timeline 1987–2012



This timeline highlights the last 25 years of conservation progress in Missouri. It includes notable *Wildlife Code* regulation changes, programs and partnerships, promotions of Department leadership, and other Department milestones.

This timeline is organized, like many Department documents, by fiscal year, which starts on July 1 of each year, and ends the following year on June 30. At the end of the timeline are two graphs that provide useful deer and turkey management information that spans the Department's restoration and management efforts.

This timeline begins in 1987, to pick up where the timeline in Keefe's *The First 50 Years* book stopped. For a chronological history of the first 50 years of the Department, be sure to review the back of his book.

For more information on the Conservation Department, visit the Department's website or review the Department's annual reports. The Missouri State Archives in Jefferson City, Mo., also maintains an extensive collection pertaining to the history of the Conservation Department and provides free access to a searchable online archive of the *Missouri Conservationist* magazine.

## CONSERVATION COMMISSION

John B. Mahaffey, *chairman*

Jeff Churan, *vice chairman*

John Powell, *secretary*

Richard T. Reed, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1987 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$48,191,510
Permit Sales .....	\$15,051,431
Federal Reimbursements .....	\$7,030,288
Sales and Rentals .....	\$2,274,068
Interest .....	\$896,645
Other Sources .....	\$283,886
<b>Total Receipts .....</b>	<b>\$73,727,828</b>

## DISBURSEMENTS

Fisheries .....	\$6,726,517
Forestry .....	\$8,745,303
Wildlife .....	\$7,677,516
Protection .....	\$6,466,223
Natural History .....	\$920,715
Administration .....	\$471,602
Staff and Technical Services .....	\$1,552,399
Public Affairs .....	\$3,340,280
Fiscal .....	\$9,003,662
Education .....	\$1,422,262
Operations .....	\$5,371,359
Engineering .....	\$1,407,234
Land Acquisition .....	\$16,212,113
Construction and Development .....	\$8,116,761
<b>Total Disbursements .....</b>	<b>\$77,433,946</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Longview Lake, a U.S. Army Corps of Engineers lake near Kansas City, is now about filled and stocked. Sets 15-inch length limit on black bass and 18-inch minimum length limit on walleyes.

## Hunting and Trapping:

1986 deer season: Nov. 14–22, with three of 57 units bucks-only, an increase of any-deer permits from 177,600 to 189,600, and changes to liberalize any-deer permits.

1986 fall firearms turkey season: Oct. 13–26 in 89 counties, two-turkey limit for first time.

As part of continuing efforts to reduce turkey hunting incidents, requires turkey hunters to attach a small bright yellow “BE SAFE” sticker to their firearm just below their line of sight to remind them to verify their target and what is beyond before pulling the trigger.

## PROGRAMS AND PARTNERSHIPS

Approves the first Department cost-share program to encourage wildlife-friendly cover choices on U.S. Department of Agriculture's Conservation Reserve Program lands. Administered cooperatively through the Department of Natural Resource's Soil and Water Conservation Program.

Expands the highly successful and nationally recognized Area Biologist five-year pilot program to staff a biologist in each Soil Conservation Service (now the Natural Resources Conservation Service) administrative area.

Increases forest cropland payment on Department lands from 50 cents to 75 cents per acre.

Enters an agreement with Unionville to manage 85-acre city water supply lake; with New Haven to develop an access on the Missouri River in Franklin County; with Iron Mountain Lake to manage the city's 100-acre lake in St. Francois County; with Ste. Genevieve to develop an access on the Mississippi River; with Higginsville to manage two city lakes; adds Spanish Lake to St. Louis County lakes receiving intensive fishery management.

Enters cooperative agreement to construct a trap and skeet range at the California Shooters Club.

Approves payment of \$57,900 to Ducks Unlimited for development of the Upper Buffalo Pound Project in southeastern Saskatchewan.

Trades 619 turkeys to Kentucky for 344 river otters.

Volunteer instructors and Department staff certify 37,402 Hunter Education students.

Authorizes expenditure of \$783,000 over three years through the North Central Forest Experiment Station to



expand and intensify the forestry inventory and analysis of Missouri.

## ADMINISTRATION

Jerry Presley is promoted from state forester to acting assistant director on Feb. 1, 1986. He becomes assistant director July 1, 1986, and he holds this position until June 30, 1987.

Jonathan Powers is hired as Public Affairs officer on July 1, 1986. He holds this position until June 30, 1994.

James H. Wilson is promoted from endangered species coordinator to Natural History administrator on June 1, 1987. He holds this position until July 31, 1995.

Changes a number of land management responsibilities between Fisheries, Forestry, and Wildlife divisions, including transfer of many fisheries areas, to improve management efficiency.

Pilots an anti-littering campaign on four Ozark streams as a 50th anniversary project.

Notes that the 15-inch length limit on black bass in many lakes was very controversial when it was adopted. Now it has proven itself, and other states are adopting it.

Employs the Department's first natural resource economist in Planning Section.

Authorizes construction of a 55-acre lake on Amarugia Highlands State Forest.

Publishes *Butterflies and Moths in Missouri*. The 385-page book provides descriptions of 324 species with 833 color photographs. Written by Richard and Joan Heitzman.

Graduates 18 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases 23,361 acres, including 1,298-acre Mudpuppy Natural History Area (later Conservation Area) in Ripley County. Receives land donations totaling 231 acres and a \$45,500 donation toward the purchase of 745 acres in Christian County.

## MILESTONES AND NOTABLE EVENTS

Commemorates the 50th anniversary of the Department, founded July 1, 1937.

Commends Ducks Unlimited on its 50th anniversary.

Recommends U.S. Environmental Protection Agency expedite its study of chlordane, a commonly used termite-control chemical.

Safety Officer James R. Watson is murdered while inspecting the Department's Marshall Junction shooting range.

Reports the Nov. 15–23, 1986 gun deer season harvest is an all-time high, to date: 102,845 deer.

Commission begins to revoke turkey-hunting privileges for shooters involved in mistaken-for-game incidents.

Notes the 50th anniversary of the Pittman-Robertson



**Milestones and Notable Events:** Dedicates the Charles Schwartz murals in headquarters, with Charles and Elizabeth Schwartz present.

Act, also known as the Wildlife Restoration Program, which passed in 1937. More than \$1.5 billion has been distributed to the states for conservation to date. Missouri's share has been \$108 million for wildlife restoration. Missouri ranks 8th nationally in allocation of Pittman-Robertson funds.



## CONSERVATION COMMISSION

Jeff Churan, *chairman*

John Powell, *vice chairman*

Richard T. Reed, *secretary*

Jay Henges, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1988 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$49,784,422
Permit Sales .....	\$15,510,057
Federal Reimbursements .....	\$9,355,317
Sales and Rentals .....	\$2,236,494
Interest .....	\$819,726
Other Sources .....	\$446,779
<b>Total Receipts .....</b>	<b>\$78,152,795</b>

#### DISBURSEMENTS

Fisheries .....	\$6,838,463
Forestry .....	\$9,436,343
Wildlife .....	\$8,715,091
Protection .....	\$7,088,739
Natural History .....	\$934,106
Administration .....	\$543,334
Staff and Technical Services .....	\$1,702,374
Public Affairs .....	\$3,594,419
Fiscal .....	\$10,098,484
Education .....	\$1,753,462
Operations .....	\$5,240,993
Engineering .....	\$1,632,311
Land Acquisition .....	\$9,037,457
Construction and Development .....	\$11,378,784
Conservation Reserve Payments .....	\$475,929
<b>Total Disbursements .....</b>	<b>\$78,470,289</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** 1987 fall turkey season: Oct. 12–25, with a limit of one turkey of either sex each week. Three additional counties—Gentry, Stoddard, and Worth—are open this fall. Only 22 counties remain closed during the fall season.

### NOTABLE WILDLIFE CODE CHANGES

#### Hunting and Trapping:

Effective Jan. 1, 1988, any person born on or after Jan. 1, 1967, must become Hunter Education certified in order to purchase any firearms hunting permit.

In 1987, issues antlerless-only deer permits for the first time. Landowners in each unit are guaranteed one-half of the bonuses available. As a result, landowners have a much better chance of getting bonuses than permittees. Requires steel shot statewide for all waterfowl hunting beginning with the 1988–1989 season.

1988 spring turkey season April 18–May 1, with one male turkey or turkey with visible beard per week.



Extends grouse season Oct. 15, 1987–Jan. 15, 1988, with a daily limit of two. Continues \$1 grouse permit.

The fall 1987 duck season is the final year Missouri duck limits are based on a point system where duck species were divided into categories that were either worth 100 points, 70 points, 35 points, or 20 points. The daily bag limit is reached when the duck bag reaches or exceeds 100 points with the last duck taken.

## PROGRAMS AND PARTNERSHIPS

Enters into agreement with Doniphan to build an access on Current River.

Enters into 25-year agreements with Bethany and Salisbury to manage and develop fishing access facilities; and with Macon to manage the 200-acre city water supply lake and build access facilities.

Approves a \$62,600 payment to Ducks Unlimited, as the third installment toward the Upper Buffalo Pound Project in southeastern Saskatchewan.

For Arbor Day, distributes 140,000 seedlings to grade school students. Tree species are northern red oak, tulip tree, and bald cypress.

Conducts a pilot project that allows for cost-sharing for planting of trees and shrubs at schools. The Hazelwood School District in St. Louis County is selected as the first cooperator. Nineteen of the 23 schools in the District participate.

Completes a mobile fire simulator, housed in a 35-foot trailer, and instructional aids for the training of Department and rural fire department personnel.

In response to an increased interest in exporting wood products, the Department holds an exporting seminar in Cape Girardeau in cooperation with the U.S. Department of Commerce and the Missouri departments of Economic Development and Agriculture. In addition, the Department plans a wood-products fair for St. Louis in late summer of 1988. Funding for this unique project was obtained from the U.S. Forest Service.

Declares Project Bobwhite a success and incorporates elements of the project into regular Department programs beginning Jan. 1, 1988. The project is a Department program for quail habitat development on public and private land and for improving public awareness of habitat needs.

Traps 1,065 wild turkeys, 130 ring-necked pheasants, and 300 giant Canada geese. Releases 90 otters and 300 ruffed grouse.

**Programs and Partnerships:** The Federal Excess Personal Property Program (FEPP) continues to be very popular with Missouri's rural fire departments. This program is the primary source of fire-related equipment for many rural fire departments, especially those departments just organizing or expanding. This year, the FEPP program in Missouri surpasses the \$6 million mark in fire equipment since the program's inception in 1964.





***Programs and Partnerships:* Releases five bald eagles at Mingo National Wildlife Refuge, and seven bald eagles at Schell-Osage Wildlife Area.**

Trapping and release of these five species will continue next year with similar objectives, except for giant Canada geese. The goose restoration program is now complete. Implements management techniques to improve bobwhite quail habitat on more than 11,000 acres of land owned or leased by the Department. Provides a total of \$642,030 in cost-share through the Conservation Reserve Program incentive program to improve wildlife habitat on 16,215 private land acres on 494 farms. The Native Prairie Restoration Incentive Program and Woodland Edge Development Incentive Program are developed and implemented to further encourage wildlife habitat on private land. These programs are delivered through Soil and Water Conservation Districts with the assistance of the Department of Natural Resources Soil and Water Conservation Program. Provides planting materials through the Wildlife Food and Cover Program to more than 4,000 related agricultural agency cooperators at a cost of approximately \$42,000. Hosts six Eagle Day weekends and reports an increased attendance of 13,015. Reports Missouri's Hunter Education program is again rated as the best in North America for the eighth time. It has been an AAA-rated program since the inception of the rating system and has become the model for the nation. Volunteer instructors and Department staff certify 57,705 Hunter Education students. Conducts 31 turkey-hunting seminars, with 2,362 students and hunters in attendance.

Releases 26 western smooth green snakes in northwest Missouri. This is the second release in a three-year recovery effort. The western smooth green snake is considered possibly extirpated from Missouri. Provides \$200,780 in state and federal matching grants to 83 recipient departments through the Rural Community Fire Protection program. Since the program's inception in 1975, the Department has allocated \$2,050,500 to 1,424 grantees. Streams for the Future Program begins—a program of special emphasis for the Department in 1988 but with aspects that will continue for many years. Goals include public awareness of the values and problems of streams, technical assistance to streambank landowners, stream improvements on Department-owned lands, and management coordination with other agencies.

## ADMINISTRATION

Jerry Presley is promoted from assistant director to director-designate on July 1, 1987. He assumes the directorship on Jan. 1, 1988. He holds this position until Jan. 31, 1997. Kenneth Babcock is promoted from Wildlife Division chief to assistant director on Jan. 1, 1988. He holds this position until Mar. 31, 1997. David Hurlbut is promoted from state forester to assistant director on Jan. 1, 1988. He holds this position until Aug. 31, 1998. Daniel Dickneite is promoted from Environmental Service officer to Environmental administrator. In April 1991,



this position title changes to Planning Division chief.  
 Dickneite holds this position until Feb. 28, 1997.  
 Gerald Ross becomes state forester on Jan. 1, 1988. He holds this position until June 30, 1992.  
 Ollie Torgerson is promoted from assistant Wildlife Division chief to Wildlife Division chief on Jan. 1, 1988. He holds this position until Aug. 31, 2002.  
 Constructs 17 miles of new hiking trails and maintains 167 miles of hiking trails.  
 Holds the first Ozark Trail Day on May 21, with 500 people in attendance.  
 Reports the federally mandated Forest Inventory and Analysis is now about 50 percent complete.  
 Because of problems with seed supply and germination, overall production at the George O. White State Forest Nursery is well below average. Distributes 4,893,720 seedlings.  
 Reports approximately 32,000 acres of state forestland have some level of oak decline. Salvages dead and dying timber and plants new trees where possible.  
 Completes the first Department public use survey at Deer Ridge Wildlife Area. Staff pioneer the methodology and approach for a series of year-long public use surveys to be used over the next 10 years to assess fishing, hunting, and viewing recreation participation.

Social and economic results are now reported in a Public Profile series of human dimensions reports (includes social, demographic, and economic topics) from Planning and Department staff.  
 Publishes *The First 50 Years*, a history of the conservation movement in Missouri, in December 1987. Written by long-time Department Information Officer James Keefe, this 446-page book highlights the people and events that created and guided the Conservation Commission and Conservation Department. Some 4,000 volumes are printed.  
 Publishes *The Amphibians and Reptiles of Missouri*, a 400-page guide to the habits, habitats, breeding, and distribution of 132 amphibians and reptiles. Written by Tom R. Johnson, former Department herpetologist.  
 The *Missouri Conservationist* magazine commemorates the 50th anniversary of the founding of the Conservation Commission with a special 48-page issue in July 1987.  
 Premieres *Missouri Outdoors*, a statewide, 13-week, half-hour television series. It is scheduled to air on 18 stations throughout the year and will reach more than 300,000 households.

**Programs and Partnerships:** Coordinates 26 managed hunts for 6,325 hunters on 14 areas managed by state, federal, and private organizations. This program has grown annually in recent years (19 hunts on 12 areas in Fiscal Year 1987), and plans are for further expansion next fiscal year.



## CONSERVATION COMMISSION

John Powell, *chairman*

Richard T. Reed, *vice chairman*

Jay Henges, *secretary*

Jeff Churan, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1989 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$52,011,285
Permit Sales .....	\$15,902,585
Federal Reimbursements .....	\$7,859,090
Sales and Rentals .....	\$2,710,763
Interest .....	\$1,043,932
Other Sources .....	\$547,954
<b>Total Receipts .....</b>	<b>\$80,075,609</b>

## DISBURSEMENTS

Fisheries .....	\$6,947,658
Forestry .....	\$9,418,406
Wildlife .....	\$8,694,587
Protection .....	\$6,915,075
Natural History .....	\$1,157,026
Administration .....	\$530,848
Staff and Technical Services .....	\$1,317,139
Public Affairs .....	\$4,121,759
Fiscal .....	\$10,046,100
Education .....	\$1,455,828
Operations .....	\$5,732,463
Engineering .....	\$1,658,078
Land Acquisition .....	\$10,204,380
Construction and Development .....	\$7,007,702
Wildlife Habitat Improvement .....	\$847,472
<b>Total Disbursements .....</b>	<b>\$76,054,521</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

1988 firearms deer season Nov. 12–20. Changes include an increase in the number of any-deer permits from 189,600 to 265,650.

Establishes the first muzzleloading firearms deer season, which runs concurrent with the regular deer season, plus the additional days of Dec. 3–5.

Archery deer and turkey season is Oct. 1–Nov. 11 and Nov. 21–Dec. 31, with one deer and one turkey of either sex allowed during each segment.

Missouri's fall 1988 duck season is reduced to 30 days with a three-duck limit, the most restrictive season since 1962. The breeding duck survey in prairie Canada tallies 2.11 million ducks. Duck numbers in prairie Canada and north-central United States have declined to 2.9 million, from 8.2 million in 1974.

## PROGRAMS AND PARTNERSHIPS

Feb. 1, 1989: Stream Team program begins and signs up its first Stream Team, the Roubidoux Fly Fishers Association. Initial Stream Team program partners are the Conservation Department and the Conservation Federation of Missouri. (The Missouri Department of Natural Resources will become a partner in 1992.)

The National Wild Turkey Federation donates \$30,600 to support wild turkey research in Missouri.

Begins a cooperative study with The Nature Conservancy on about 300 species of Central American birds that spend part of the year in Missouri.

Trades 20 river otters to Nebraska for 150 pheasants.

Agrees to manage Proctor Park Lake, a 7-acre lake in Moniteau County, in cooperation with the City of California.

Establishes a long-term resource monitoring field station at the Department's Cuivre Island Clubhouse on Pool 26. Lays groundwork for setting up a field station at Cape Girardeau on the open river.

Develops an initiative to restore prairie chicken habitat on private land.

Completes a statewide benthos database, which will ultimately be used to develop criteria to protect and enhance Missouri's streams.

Continues coordination for the state in the Upper Mississippi River Environmental Management Program, a \$198 million federal program to restore fish and wildlife habitat on the Upper Mississippi River. This year, 10 habitat rehabilitation projects, totaling \$8 million, are in the works.

Stocks 110 ponds with 15,400 channel catfish, 2,600

bullheads, and 9,300 hybrid sunfish for kids' fishing clinics.

Provides about 8,700 fish for urban fishing clinics and stocks channel catfish, bullheads, and carp in 31 urban lakes in Kansas City, St. Louis, Sedalia, and St. Joseph.



Volunteer instructors and Department staff certify 30,702 Hunter Education students.

Completes urban forest survey of 40 Missouri communities as part of a national survey coordinated by the American Forestry Association and the U.S. Forest Service. Results show approximately three available planting spaces for each existing tree along city streets. The most numerous species are silver maple, Siberian elm, green ash, pin oak, sugar maple, and sweetgum.

A statewide forest inventory determines Missouri has gained more than one million acres of forestland in the past 17 years. Forests cover 14 million acres of the state. Implements management techniques to improve bobwhite quail habitat on more than 19,000 acres of land owned or leased by the Department.

Conducts fieldwork to survey rare plants and animals including the pondberry, prairie mole cricket, Ozark big-eared bat, Bachman's sparrow, running buffalo clover, decurrent false aster, Mead's milkweed, auriculate false foxglove, geocarpon, western prairie fringed orchid, and Missouri bladderpod.

Completes 10th year of statewide distribution of seedlings for Arbor Day to fourth-grade classes throughout Missouri. The statewide distribution involves 4,000 teaching aid guides sent to 1,700 schools and 140,000 seedlings distributed to students. Tree species are Kentucky coffee tree, lace bark elm, and ponderosa pine.

Conducts 55 Kids Fishing clinics with 58 volunteer sponsors participating and 4,620 children from ages 5–14.

Creates and hosts the first ever Hunting Incident Investigation Academy to train conservation officers to investigate hunter-involved shootings.

## ADMINISTRATION

Missouri firefighters take action on 3,926 wildfires, which burn 52,303 acres, slightly above average. Acreage lost is about 49 percent above average. Debris burning is again the leading cause with arson second. Missouri experiences an unusually high 49 lightning fires.

Establishes the Missouri Conservation Hall of Fame, with the first seven members: Paul G. Barnickol, Rudolf Bennett, A. George Morris, Werner O. Nagel, Ted Scott, Ruthford Henry Westveld, and George O. White.

Purchases 20,909 acres, including 762-acre Clear Creek Natural History Area (later Conservation Area) in Vernon and Barton counties. Receives land donations totaling 392 acres. Receives a \$75,000 donation toward the purchase of 485 acres in Butler County.

## MILESTONES AND NOTABLE EVENTS

Much of Missouri experiences a severe drought during 1988 and early 1989. Several farmers and city



**Programs and Partnerships:** Agrees to trade 288 turkeys for 160 river otters in 1992–1993 to complete restoration of otters in Missouri.

water-supply districts receive approval to withdraw water from Department fishing lakes. The state also experiences significant deer mortality from hemorrhagic disease outbreak.

In *Green Acres Land & Cattle Company, Inc. v. State of Missouri and Larry R. Gale*, a private landowner alleges that migratory and resident waterfowl have caused damage to his crops as a result of the state's maintenance and management of the Schell-Osage and Four Rivers wildlife management areas in west-central Missouri. The Missouri Court of Appeals, Western District, rules in favor of the Conservation Commission and affirms the dismissal of the plaintiff's lawsuit, finding that the maintenance and management of the wildlife preserves are within the reasonable exercise of the Conservation Commission's constitutional authority. The Court notes that although the state provides habitat for the birds, it exercises no control over them.

Dedicates the Springfield Conservation Nature Center on Oct. 6, 1988. The center soon averages more than 110,000 visitors annually.

December 1988: 863,000 gallons of oil pour into the Gasconade River near Vienna due to a pipeline break. At the time, this is the largest inland oil spill in the country's history. Great blue heron, wild turkey hen, deer, eagle, muskrat, and beaver are reported dead on-site. The Department of Conservation and the Department of Natural Resources begin extensive sampling and monitoring of the area to determine the environmental impact.

## CONSERVATION COMMISSION

Jay Henges, *chairman*

Andy Dalton, *vice chairman*

Jerry P. Combs, *secretary*

John Powell, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1990 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$54,014,662
Permit Sales .....	\$18,181,700
Federal Reimbursements .....	\$6,632,876
Sales and Rentals .....	\$3,103,717
Interest .....	\$1,657,240
Other Sources .....	\$702,023
<b>Total Receipts .....</b>	<b>\$84,292,218</b>

#### DISBURSEMENTS

Fisheries .....	\$7,613,997
Forestry .....	\$10,633,019
Wildlife .....	\$9,525,319
Protection .....	\$8,085,220
Natural History .....	\$1,442,774
Administration .....	\$564,952
Staff and Technical Services .....	\$1,627,210
Public Affairs .....	\$4,044,783
Fiscal .....	\$10,937,691
Education .....	\$1,260,577
Operations .....	\$6,340,739
Engineering .....	\$1,922,675
Land Acquisition .....	\$6,710,581
Construction and Development .....	\$8,541,436
Wildlife Habitat Improvement .....	\$547,163
<b>Total Disbursements .....</b>	<b>\$79,798,136</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

Fishing:

Approves increase in daily trout tag fee to \$2.

Hunting and Trapping:

Effective Jan. 1, 1990: Approves use of steel shot on seven wetland areas for rail and snipe: Duck Creek, Schell-Osage, Fountain Grove, Ted Shanks, Marais Temps Clair, Grand Pass, and Bob Brown.

Opens four additional counties to ruffed grouse hunting: Carter, Oregon, Ripley, and Shannon.

The fall 1989 Canada goose season is 40 days long with a one-bird limit. In the Swan Lake Zone, the season is open from Nov. 4–12 and Nov. 24–Dec. 24, unless a quota of 10,000 geese is reached before Dec. 24. Swan Lake Zone has a 10-shell limit for all geese.

## PROGRAMS AND PARTNERSHIPS

Approves 25-year Community Assistance Program agreements with Farmington and Lawson to manage city lakes; with The James Foundation at St. James; with Valley Park to develop public use facilities on the Meramec River; with the Lewis County Water District No. 1 to develop public use facilities and provide fishery management at Ewing City Lake; with the St. Louis



**Programs and Partnerships:** Receives \$10,000 from Quail Unlimited for research.



District U.S. Army Corps of Engineers to allow public access to two lakes totaling 200 acres; and with the City of Washington for Missouri River access. To date, the Department has agreements with 33 communities, which results in better fishing and public access to 42 lakes totaling 3,970 acres.

Missouri Urban and Community Forestry Advisory Council is formed. Is later renamed to Missouri Community Forestry Council.

Approves \$42,700 payment to Ducks Unlimited for wetland project in Saskatchewan—45 percent of the revenue from the 1988 Missouri waterfowl stamp.

Trades 25 wild turkeys to the State of Washington for 75 ruffed grouse.

Grants St. Louis Science Center up to \$2 million for an environment and ecology hall, to be named for the Department.

Holds the first Grassland Judging Contest for FFA students in collaboration with the Soil Conservation Service and Missouri University Extension.

Volunteer instructors and Department staff conduct 1,135 Hunter Education courses and certify 30,634 students.

Reports many schools have adopted the Sportsmen Protecting Our Resources Together (SPORT) program as the base for their conservation ethics education courses. SPORT has gained national acclaim. Seventeen states and the National Rifle Association have requested our assistance in developing similar programs.

Governor John Ashcroft initiates the Branch Out Missouri tree-planting project that challenges communities to make Missouri green by planting one million trees over the next year. Every mayor in the state receives a coupon worth \$100 toward the purchase of trees for city planting. The Forestry Division provides financial and technical assistance, and partial funding is provided by the U.S. Forest Service. To date, 110 communities respond to the challenge to plant trees, and 38 communities use the coupon.

Stocks 31 city and county lakes in the urban areas of St. Louis, Kansas City, Sedalia, and St. Joseph with 134,000 pounds of keeper-sized channel catfish, bullheads, and carp as part of the popular urban fishing program.

Publishes the results of recreational surveys of the Missouri and Osage rivers.

The nursery receives 16,588 orders for tree and shrub seedlings and distributes 5,276,825 plants.

Traps 200 wild turkeys and 429 ring-necked pheasants (306 in Kansas).

Exchanges 20 hen turkeys and seven gobblers for 75 ruffed grouse from the State of Washington.

Releases 215 otters and 200 ruffed grouse. Trapping and release of these species will continue next year with similar objectives.

Spends a total of \$284,051 in cost-share through the Conservation Reserve Program incentive program to



**Programs and Partnerships:** Conducts 98 Kids Fishing clinics with an average of eight volunteer sponsors per clinic participating and 8,860 children from ages 5–14.

improve wildlife habitat on 15,345 private land acres on 339 farms.

Leads statewide forestry collaboration efforts that result in the formation of the Missouri Community Forestry Council.

## ADMINISTRATION

Donald Henson is promoted from assistant Engineering administrator to Engineering administrator on May 1, 1990. He holds this position until Aug. 31, 1998.

Makes broad changes in Fisheries Division organization, including reclassifications, promotions, and transfers.

The Department's Wetland Plan recommends acquiring and developing four new wetland areas (12,000 acres by

the Department and 12,400 by U.S. Fish and Wildlife Service), adding to six existing areas (11,820 acres), additional development of some existing areas (27,006 acres), and small wetlands (5,092 acres), plus additional acquisitions to improve the amount and distribution of Missouri wetland habitats. The plan recommends providing management assistance for 38,700 acres of private wetlands and development of an additional 12,500 private wetlands. It calls for the elimination of purple loosestrife. It estimates it will cost \$59.1 million to achieve these objectives by 2000. This plan lays the foundation to significantly advance wetland restoration in Missouri where approximately 87 percent of the original wetlands have been lost.

Reviews and comments on the update to the U.S. Army Corps of Engineers' *Master Water Control Manual for the Missouri River*.

Reaches an agreement with the City of Columbia regarding the use of Columbia's treated wastewater effluent as a water source for wetland management on Eagle Bluffs Conservation Area.

The Department receives \$1.6 million from the U.S. Army Corps of Engineers as payment for facilities and lost

income at Trimble Wildlife Area, which was flooded by Smithville Reservoir, finally completing coordination on that project after many years of effort.

Salvages about 2,300 federally endangered fat pocketbook mussels from the St. Francis River in Arkansas during a dredging operation and transplants them to two sites on the Upper Mississippi River in Missouri.

Begins using *Monetary Values of U.S. Amphibians*, published by the Society for the Study of Amphibians and Reptiles, to calculate monetary losses and seek reimbursements for amphibians killed during a pollution spill.

Completes *The 7-City and Outstate Survey* on urban Missourians' interests in forests, fish, and wildlife. This mail survey and urban component is similar to the Three-City Survey completed in 1980.

The *Missouri Conservationist* magazine reaches a monthly circulation of 370,000 copies.

Publishes the book *Water Plants for Missouri Ponds*. The 151-page book features descriptions and line drawings of 68 aquatic and shoreline plant species found in Missouri, along with 58 color photos. Written by James Whitley, Barbara Bassett, Joe Dillard, and Rebecca Haefner.

**Administration:** Adds five new areas to the Natural Areas system. Caney Mountain Natural Area becomes one of the largest state natural areas with more than 1,300 acres of old growth forest, savanna, and glades, as well as numerous rare plants and animals representative of the White River region. The Natural Areas system currently includes 156 areas totaling 24,840 acres in a variety of ownerships.







**Milestones and Notable Events:** Initiates the Missouri Ozark Forest Ecosystem Project, a cooperative 100-year study to discover the best ways to sustain forests while providing habitat for native plants, birds, insects, reptiles, and other wildlife. The project will involve the application of uneven-aged management, even-aged management, and non-manipulative (no-cut) forest management on three compartments. Effects of the three forest management treatments will be measured in terms of forest interior birds, reptiles, amphibians, insects, water, trees, and other vegetation. The compartments, ranging from 800 to 1,100 acres in size, are located on Department land in Carter, Shannon, and Reynolds counties.

Releases *Fishing Missouri*, a film showing the great variety of fishing opportunities available in the state, and *Forests for the Future*, which presents the multiple-use approach to forest management.

Completes *The Missouri River Recreational Survey*. This research, led by George Fleener and other Department staff, measures the number and kinds of recreationists using the Missouri River in the State of Missouri.

Publishes a four-color poster *Life in a Cave*, featuring original artwork of common cave wildlife to recognize 1990 as the “Year of the Caves.”

Graduates 14 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases 10,926 acres. Receives two donated tracts totaling 280 acres. Receives a \$59,292 donation toward the purchase of a 188-acre tract at General Watkins State Forest in Scott County and \$20,000 toward the purchase of the 316-acre Peter A. Eck Natural History Area in Texas County.

Accepts perpetual easement on 371 acres in Pulaski County as river access on the Gasconade River.

## MILESTONES AND NOTABLE EVENTS

Dec. 13, 1989: U.S. Congress passes North American Wetlands Conservation Act, providing matching grants for wetlands conservation projects to benefit wildlife.

Commemorates the 40th anniversary of the Dingell-Johnson Act, also known as the Sport Fish Restoration program, which passed in 1950. A major enhancement to the act occurred in 1984 with the adoption of the Wallop-Breaux Amendment, which created the Aquatic Resources Trust Fund. It provides additional funds from federal gasoline excise taxes attributed to motorboats, which are used for constructing motorboat accesses, developing aquatic education, and other fisheries-related programs.

Certifies the 500,000th Hunter Education student.



## CONSERVATION COMMISSION

John Powell, *chairman*

Jerry P. Combs, *vice chairman*

Andy Dalton, *secretary*

Jay Henges, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1991 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$54,863,087
Permit Sales .....	\$21,004,672
Federal Reimbursements .....	\$5,416,882
Sales and Rentals .....	\$3,188,885
Interest .....	\$1,522,195
Other Sources .....	\$848,884
<b>Total Receipts .....</b>	<b>\$86,844,605</b>

#### DISBURSEMENTS

Fisheries .....	\$7,955,659
Forestry .....	\$11,087,018
Wildlife .....	\$10,440,434
Protection .....	\$8,644,413
Natural History .....	\$1,735,393
Administration .....	\$518,763
Staff and Technical Services .....	\$2,363,457
Public Affairs .....	\$3,687,271
Fiscal .....	\$11,754,797
Education .....	\$1,206,191
Operations .....	\$7,170,226
Engineering .....	\$1,931,384
Administrative Accounts .....	\$882,229
Land Acquisition .....	\$12,072,774
Construction and Development .....	\$11,528,235
<b>Total Disbursements .....</b>	<b>\$92,978,244</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** Establishes the traditional opening date for black bass fishing season in Ozark streams as May 25, the Saturday preceding Memorial Day.

### NOTABLE WILDLIFE CODE CHANGES

#### Fishing:

Creates trophy-trout fishing area on Roubidoux Creek near Waynesville.

#### Hunting and Trapping:

Changes the limit during the fall archery season so that two turkeys can be harvested after the firearms deer season if one was not taken prior to the firearms deer season.

Establishes three zones for duck hunting in Missouri:

South, North, and Middle. Under the federal proposal, selection of the option of three zones with continuous seasons in each zone (no split season options) for 1991 must continue for a period of five years.



Continues to prohibit the use of dogs for hunting deer in Missouri, based on past surveys, anticipated conflicts, and other concerns as experienced by southeastern states that allow deer hunting with dogs.  
Bans the trapping and hunting of spotted skunks.

## PROGRAMS AND PARTNERSHIPS

Approves transfer of up to 40 river otters to the Nebraska Game and Parks Commission in exchange for up to 300 wild-trapped pheasants.

Approves transfer of 280 wild turkeys to the Kentucky Department of Fish and Wildlife Resources in exchange for 40 peregrine falcons during 1991–1994.

Captures and utilizes 112 wild turkeys for trade and captures 706 ring-necked pheasants for relocation to unoccupied habitat.

Evaluates experimental plantings of running buffalo clover for restoration possibilities.

Plants additional decurrent false asters to bolster existing populations.

Enters 25-year Community Assistance Program agreements with Cameron, DeKalb County; Memphis, Scotland County; and Moberly, Randolph County. Partners with Little River Drainage District to develop an access on Headwaters Diversion Channel, Cape Girardeau County; enters a 15-year agreement with Jackson County Parks and Recreation Department. Partners with Highway and Transportation Commission to develop an access on Highway 160 right of way on Little Black River, Butler County, and to develop a public fishing access area on U.S. Highway 71 right-of-way at South Grand River, Cass County.

Enters into agreement with Friends of the Zoo of Springfield, Missouri, Inc., to share costs for the design, fabrication, and installation of a new Missouri habitats exhibit area at Dickerson Park Zoo in Greene County.

Contracts for construction of regional headquarters facility on the Missouri Western State College campus in St. Joseph.

Volunteer instructors and Department staff conduct 1,114 Hunter Education courses and certify 29,993 students.

**Administration:** Begins construction of wetland at Eagle Bluffs Conservation Area, one of 12 major wetland developments. This project later wins the Association of Conservation Engineers' First Place Award of Excellence.







**Programs and Partnerships:** Missouri Stream Teams expand to 243 streams with approximately 8,000 members.

Participates with 10 other states in a pilot program to establish a national migratory bird-hunting permit in 1992–1993. This pilot effort would lead to improved national hunter survey capabilities.

Stream Unit plays a major role in hosting the second Rivers and Streams Conference, which attracts 500 attendees and charts a course for the future of Missouri streams.

Establishes a 100-percent federally funded, long-term monitoring station at Cape Girardeau, where biologists monitor fish, water quality, and vegetation. It is the most downstream location in the federally coordinated network, which is part of the Environmental Management Plan for the Mississippi River.

Through the Summer Urban Fishing program, stocks 32 city and county lakes in the urban areas of St. Louis, Kansas City, Sedalia, and St. Joseph.

Awards approximately \$200,000 in state and federal matching grants to 83 fire departments. Since the inception of this program in 1975, Forestry Division has allocated \$2,650,500 to 1,762 grantees.

Coordinates expenditures totaling \$261,258 in cost-share through the Conservation Reserve Program incentive

program to improve wildlife habitat on 13,454 acres on 307 private farms.

Works with other midwestern states to establish the Midwest Private Land Management Group to advise midwestern state fish and wildlife agency directors regarding private land issues, including the Farm Bill.

Implements a private land wetland restoration initiative with funding secured from the U.S. Fish and Wildlife Service.

Forms the Mississippi Interstate Cooperative Resource Association, a partnership of 28 state natural resource departments to improve management of interjurisdictional fish and other aquatic resources in the Mississippi River basin.

Initiates the Operation Forest Arson hotline.

## ADMINISTRATION

Shannon Cave is promoted from assistant Public Affairs administrator to Public Information officer on Nov. 1, 1990. He holds this position until June 30, 1997.

Upgrades Engineering and Operations sections to Division status.



Adopts a position statement on rivers and streams to reemphasize its strong and continuing interest in the stream resources of the state.

Approves modification of rulemaking that sets out the statutory authority of the Commission to suspend, revoke, or deny a permit or privilege, in addition to its constitutional authority, and provides a uniform procedure for administrative hearings when a hunter inflicts injury to another person mistaken for game.

Develops a backyard wildlife bundle with native forbs, shrubs, and trees, and distributes 525 bundles this year.

Provides nonconsumptive recreational development recommendations for at least 55 Department areas to promote nonconsumptive opportunities on public and private lands and water.

Develops management guidelines for western fox snakes at Marais Temp Clair, bald eagles on the upper Mississippi River, peregrine falcons in urban areas, and Illinois mud turtles at Rose Pond.

A recovery plan for decurrent false aster has been completed in conjunction with the U.S. Fish and Wildlife Service.

Endangered species monitoring includes bald eagle nest productivity; the breeding or nesting status of American bitterns, king rails, black rails, Swainson's hawk, Swainson's warbler, Bachman's sparrow, short-eared owls, and northern harriers; prairie mole cricket populations; the status and distribution of the Illinois chorus frog and the Ozark cavefish; and black-necked stilt distribution.

Develops a *Land Acquisition and New Areas Expansion Guide*.

Completes the 160-acre Maple Leaf Lake in Lafayette County, which includes major developments for disabled anglers.

Begins construction on Belcher Branch Lake in Buchanan County; construction of wetland at Eagle Bluffs Conservation Area, one of 12 major wetland developments; and construction of regional headquarters facility in Cape Girardeau.

Implements management techniques to improve bobwhite quail habitat on more than 23,000 acres of land owned or leased by the Department.

Initiates a new informational brochure series called *Aquaguides*.

Publishes *Landscaping for Backyard Wildlife*.

Publishes *Wildlife Management for Missouri Landowners*.

Releases *It's Your Choice*, a Hunter Education program training film. The film, which includes dramatic wildlife footage, has drawn high praise statewide and nationally from those teaching hunter skills.

Releases *Forests for the Future*, a new film on multiple-use forest management.

The *Missouri Conservationist* magazine is selected as the best magazine of its kind in the country by the Association for Conservation Information.

Completes the multi-media production *Grandin, The Big Mill and Tall Timber*.

Reports that more than two million Missourians watch *Missouri Outdoors*, the Department's 30-minute, 13-week television series. More than 25 network affiliates, independent stations, public broadcasting affiliates, and cable outlets carry the show.

Radio production begins on the 28 episodes of *The Fishing Feature*, the fifth year for this weekly 60-second informational radio show, which highlights fishing opportunities in our state.

Begins delivering *All Outdoors* press releases to 41 newspapers through Missouri Link, a private, electronic information distribution service. *All Outdoors* is recognized throughout the state and has won numerous awards from the Association for Conservation Information.

Graduates 15 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases 10,405 acres, including 161-acre Grand Bluffs Natural History Area (later Conservation Area) in Montgomery County. Receives land donations totaling 3,294 acres.

## MILESTONES AND NOTABLE EVENTS

Constructs a Rural Forest Fire Equipment Center at Lebanon to coordinate Federal Excess Personal Property program (FEPP) acquisition, processing, distribution, and disposal. For the first time, all FEPP will be managed on a daily basis from one location. This facility will also supply rural fire departments with hard-to-find military vehicle parts.

Chlordane remains the predominant contaminant in Missouri fish and waters. Despite the ban on the use of this chemical as a termiticide, it will remain in the environment for years to come. Most of the waters of the state that are seriously contaminated have now been identified. Selected monitoring of contaminants in fish will continue as a precaution in protecting the state's valuable fishery.

Receives the National Fresh Water Fishing Hall of Fame's 1991 Government Entity Award for wise management of conservation funds and innovative programs to benefit the state's fishery.

Conservation Commission establishes an award for Commissioners to recognize their stewardship of the forest, fish, and wildlife resources of the state. The award will be presented to all past (living) Commissioners and to all present and future Commissioners upon completion of their term as members of the Conservation Commission.

## CONSERVATION COMMISSION

**Andy Dalton, chairman**  
**Jay Henges, vice chairman**  
**Jerry P. Combs, secretary**  
**John Powell, member**

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1992 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$55,716,473
Permit Sales .....	\$20,985,464
Federal Reimbursements .....	\$15,186,662
Sales and Rentals .....	\$3,620,311
Interest .....	\$1,013,525
Other Sources .....	\$934,204
<b>Total Receipts .....</b>	<b>\$97,456,639</b>

## DISBURSEMENTS

Fisheries .....	\$8,803,628
Forestry .....	\$11,616,285
Wildlife .....	\$10,396,554
Protection .....	\$8,910,527
Natural History .....	\$1,980,618
Administration .....	\$549,401
Staff and Technical Services .....	\$2,645,045
Public Affairs .....	\$3,994,437
Fiscal .....	\$12,807,408
Education .....	\$1,240,223
Operations .....	\$7,014,703
Engineering .....	\$2,014,395
Administrative Accounts .....	\$581,266
Land Acquisition .....	\$10,745,655
Construction and Development .....	\$15,388,613
<b>Total Disbursements .....</b>	<b>\$98,688,758</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Establishes permanent dates for annual free fishing days as the Saturday and Sunday following the first Monday in June.

Establishes new wild trout management area on a 5.5-mile portion of the Eleven Point River in Oregon County from Greer Spring Branch to Turner Mill. Daily and possession limit is three trout. Prohibits gigging.

Establishes special black bass stream management areas on sections of the Big Piney, Meramec, and Big rivers to evaluate methods for limiting exploitation of smallmouth bass and to ultimately improve this popular fishery.

Reduces daily and possession limits of mussels taken under a sportfishing permit from 25 to five.

## Hunting and Trapping:

Prohibits pursuing and taking wildlife trapped by, or fleeing from, floodwater or fire.

To provide protection to an expanding bear population, includes black bear along with deer and any endangered species that, when causing property damage, may be destroyed by the property owner only with specific permission from an agent.

**Notable Wildlife Code Changes:** Requires hunter orange to be worn while hunting deer with a firearm.







**Programs and Partnerships:** Enters a five-year agreement with St. Louis to manage 13 city-owned lakes in St. Louis County; and a 25-year agreement with Ballwin and Ferguson to manage their city-owned lakes in St. Louis County.

Requires new Migratory Bird Harvest Information Program Card to pursue, take, possess, and transport migratory birds, except crows, at a fee of \$2.  
Establishes a formula for turkey season dates, and states bag limits will be established annually.

## PROGRAMS AND PARTNERSHIPS

Enters into an agreement with the Missouri Highway and Transportation Commission to develop and maintain public fishing access areas on rights of way at: Highway A at Nodaway River, Holt County; Highway M at Platte River, Nodaway County; Highway B at 102 River, Andrew County; Missouri Highway 139 at Grand River, Chariton County; and Missouri Highway 24 at Chariton River, Chariton County.

Enters 25-year Community Assistance Program agreements with Harrisonville, Cass County; Windsor, Henry, and Pettis counties; Louisiana, Pike County; Waynesville, Pulaski County; and Ewing, Lewis County.

Initiates Stream Stewardship Agreements as the fourth and last incentive under the Streams for the Future program. The three-year pilot program will be implemented on Marmaton River in Vernon County, Bourbeuse River in Franklin County, and the South Fabius/Troublesome Creek river system in Marion County.

Transfers four river otters to the Dickerson Park Zoo, Springfield, for its Missouri species exhibit, to be completed in 1992.

Approves transfer of 83 wild turkeys to the Kentucky Department of Fish and Wildlife Resources in exchange for 46 river otters to be received no later than 1992, to complete the restoration of river otters as prescribed in the *Species Management Plan for the River Otter in Missouri*.

Approves transfer of wild-trapped turkeys to the South Dakota Department of Game, Fish and Parks, from 1992 to 1996, in exchange for wild-trapped ring-necked pheasants. The rate of exchange will be seven pheasants for each turkey.

Approves transfer of up to 400 Canada geese per year for up to five years to the Kansas Department of Wildlife and Parks.

Authorizes payment of \$54,300 to Ducks Unlimited as the second installment toward the Russell Marsh Project in east-central Saskatchewan.

Provides funds to the Missouri Botanical Garden of St. Louis for exhibits in the Brick Manor House at the Garden's Arboretum in Gray Summit.

Enters into agreement with The League of Northern Indian Nations to designate 14 acres of Merrill Horse Access, Jefferson County, as a Native American burial ground.

Authorizes development and implementation of a new cost-share incentive program to complement the U.S. Department of Agriculture's Wetland Reserve Program.

Enters agreement with Albany, the Soil Conservation Service, and the Gentry County Soil and Water Conservation District for acquisition and development of a 1,950-acre lake in Gentry County on Town Branch for recreation, flood, and erosion control.

Extends agreement with the U.S. Forest Service, under which Robert Massengale will continue on special assignment to the Forest Service as state and private forestry rural development coordinator in the states of Missouri, Iowa, Illinois, and Indiana, effective July 1, 1992 for a period not to exceed 36 months.

Authorizes agreement with Ducks Unlimited to implement the approved allocation of all Missouri waterfowl stamp proceeds for three years (Fiscal Years 1993–1995) to the Prairie Joint Venture Project of the North American Waterfowl Management Plan, with funds designated for use in Canada.

Stream Team Program, inaugurated by Governor Ashcroft in 1989, and cosponsored by Conservation Federation of Missouri, has grown to almost 300 groups, representing more than 10,000 individuals.

Hosts the Department's first Hunter Education volunteer conference at Lake of the Ozarks.

A major evaluation of the Area Biologist Program shows it to be a cost-effective way of incorporating forest, fish, and wildlife considerations into U.S. Department of Agriculture conservation planning efforts with agricultural producers.

Develops a coordinated public/private land landscape-scale project to conserve prairie wildlife (the prairie chicken as the flagship species) in west-central Missouri.

## ADMINISTRATION

Reports on fishing tournaments in Missouri. Tournaments have been steadily increasing, from about 500 in 1970 to 1,900 in 1991. Missouri hosts more fishing tournaments than any other state, with bass tournaments being the most prevalent. The Department is working closely with sponsors to assure that proper catch-and-release results in high survival rates of the fish. Tournaments are being closely monitored, and there is no evidence that tournaments are adversely affecting the black bass fishery.

Adopts a position statement on fishing, hunting, and trapping tournaments that the Department philosophically opposes them but no longer supports legislation to prohibit those events, because fishing tournaments often have more stringent rules than those in the *Wildlife Code*, among other reasons cited.

Designates Cowards Hollow Natural Area in Carter County, Haney Pond Natural Area in Oregon County, and Hughes Mountain Natural Area in Washington County.

Approves increasing, effective Jan. 1, 1992, the scholarships offered under the Department's education support program to African-American students seeking conservation-resource careers.

Approves new financial assistance policy for evaluating qualified projects when dealing with local entities seeking financial support for conservation-related projects.

Proceeds with development of a shooting range on Forest 44 Conservation Area.

Adopts position statement on biological diversity, built on the *Biodiversity Task Force Report*, which commits the Department to promote biological diversity, to integrate those concepts into its educational program, and to participate in multiagency efforts for sound ecosystem management.

Designates \$94,200 from waterfowl hunting stamp sales to wetland development at Bob Brown Wildlife Area in Holt County.

Feb. 3, 1992: The Missouri attorney general announces a settlement agreement with Shell Oil Company for the Gasconade River oil spill. The state receives \$7 million for natural resource damages. Of the \$7 million, the Department receives \$2.8 million, enabling the purchase of 80,000 acres in the Current and Jack's Fork river watersheds; construction of concrete boat ramps, parking lots, handicapped accessible restrooms, access roads, and handicapped-accessible fishing docks and jetties at Mozingo Lake; and acquisition and development of lands for boat and fishing access to the Gasconade River and its tributaries.

Contracts for construction of water control structures at Schell-Osage Wildlife Area in St. Clair and Vernon counties; wetlands and fishing ponds on the Ralph and Martha Perry Memorial Wildlife Area, Johnson County; ponds on the Lamine River Wildlife Area, Cooper and Morgan counties; and at Rebel's Cove Wildlife Area, Putnam County.

Approves partial funding of the Eagle Bluffs Conservation Area development with money from the North American Wetlands Conservation Act.

Authorizes filing the Department's organization plan and Chapter 1 of the *Wildlife Code* as presented, to reflect the appointment of an assistant director (to replace the deputy director) and reassignment of administrative responsibilities for several Department programs to the retitled position.

Approves new wetlands policy, which delineates Department goals and considerations regarding the wetland resources of the state. This will be included in the *Policies and Guidelines for Area and Resource Management Manual*.

Initiates a review of all programs and activities, primarily their costs and benefits, based on the Department's five-year strategic plan (Fiscal Years 1990–1994), and each unit's organizational plan.

Approves Fiscal Year 1992–1993 Budget of \$102,023,596 (an operating budget of \$81,023,596 and a capital improvement budget of \$21 million). It reflects a total increase of \$348,801 and is the first Department budget request to exceed \$100 million.



Purchases 44,298 acres, including 95-acre Blue Lick Natural History Area (later Conservation Area) in Saline County. Receives land donations totaling 1,515 acres.

## MILESTONES AND NOTABLE EVENTS

For the first time, doe harvest exceeds antlered bucks, signaling a point where most deer populations have been restored. Harvest and regulation liberalizations focused on the stabilization of the deer herd are proving to be effective.

Opens the Powder Valley Conservation Nature Center in Kirkwood in October 1991.

The Commission presents Harry and Lina Berrier of Columbia a special recognition award. Beginning in 1985, the Berriers have made donations to the Department.

Their only stipulation is that the funds be applied toward purchase of land. To date, those contributions total \$188,486.

Department receives an award plaque from the Soil Conservation Service in recognition of its excellent working relationship and good cooperation with that federal agency.

Director Jerry Presley receives the Missouri Farm Bureau's highest award in recognition of his demonstrated leadership and outstanding cooperation with the agricultural community.

Reports *Explore Missouri Streams!*, developed cooperatively with the St. Louis Zoo, received a Gold Award from the Association of Visual Communicators. It also won a special award for Best Environmental Submersion for its underwater point-of-view videography.

**Administration:** Contracts for construction of a nature center building at Department headquarters in Jefferson City. Renames the nature center in Jefferson City the Runge Conservation Nature Center.



## CONSERVATION COMMISSION

Jay Henges, *chairman*Jerry P. Combs, *vice chairman*Andy Dalton, *secretary*John Powell, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1993 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$58,896,003
Permit Sales .....	\$20,595,417
Federal Reimbursements .....	\$10,372,943
Sales, Rentals, and Leases .....	\$4,317,293
Interest.....	\$609,394
Other Sources .....	\$1,310,496
<b>Total Receipts .....</b>	<b>\$96,101,546</b>

## DISBURSEMENTS

Fisheries.....	\$8,710,662
Forestry.....	\$11,653,441
Wildlife .....	\$10,609,435
Protection .....	\$8,287,976
Natural History .....	\$2,026,100
Education and Information .....	\$6,013,674
Administration .....	\$1,773,073
Central Charges .....	\$10,844,690
Support Services.....	\$15,599,506
Land Acquisition.....	\$4,623,359
Construction and Development .....	\$10,518,223
<b>Total Disbursements .....</b>	<b>\$90,660,139</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Effective July 1992, bans commercial harvest of catfish from the Missouri River, contingent on similar action by Kansas, Nebraska, South Dakota, and Iowa. This ban would lead to a resurgence of sportfish angling for catfish on the Missouri River.

## Hunting and Trapping:

Limits Hunter Education certification to people 11 years of age or older to enhance retention of information.

Five new counties open for 1992 fall grouse hunting: Crawford, Madison, Reynolds, Ste. Genevieve, and Washington.

Amends hunting methods to clarify that, during the firearms deer season, trappers may carry firearms not legal for hunting deer to dispatch trapped animals. This change will make the hunting methods rule consistent with the deer-hunting rule.

Reduces fee for nonresident furbearer hunting and trapping permit to \$75, in recognition of low furbearer pelt markets that have led to reduced harvest pressure.

During fall of 1992, holds the first year of a three-year experimental early Canada goose season in a Central Missouri Zone that includes portions of Boone, Callaway, and Cole counties. This experimental season was in addition to the regular Canada goose season and is held from Sept. 30–Oct. 11 with a daily bag limit of three Canada geese. This is intended to help slow the growth of the resident giant Canada goose population without jeopardizing migrant populations of Canada geese.

## General:

A new rule, effective in late 1992, establishes permit and requirements for commercial deer meat processors.

Amends wildlife confinement standards rule to specify acceptable construction standards for cages, pens, and other enclosures; stipulates that animals must be confined at all times; and stipulates that dangerous wild animals may not roam freely anywhere within a residence or inhabited dwelling.

## PROGRAMS AND PARTNERSHIPS

Establishes Charitable Meat Donation program (now called Share the Harvest) to allow hunters to share their harvest with those in need through food pantries and other qualifying charitable efforts. Partners include the Conservation Federation of Missouri and the Missouri Bowhunters Association.

Approves transfer of 100 wild turkeys per year for five years to the Texas Parks and Wildlife Department. As part of this agreement, the National Wild Turkey Federation will





***Programs and Partnerships:*** Transfers 20 wild turkeys to the Minnesota Department of Natural Resources, in exchange for 300 ruffed grouse per year, trapped in Minnesota by a Missouri-supervised crew.

deposit \$500 in the Missouri State Wild Turkey Super Fund for each wild turkey provided to Texas.

Enters into agreement with the Soil Conservation Service for construction of a 52-acre lake on Rudolf Bennitt Wildlife Area, Howard County.

Authorizes 25-year Community Assistance Program agreements with Columbia, Boone County; Maryville, Nodaway County; Wentzville, St. Charles County; Lamar, Barton County; Butler, Bates County; Jefferson City, Cole County; Dexter, Stoddard County; and Cole County Commission.

Enters into a 20-year Community Assistance Program agreement with St. Louis Department of Parks, Recreation, and Forestry, and the Water Division of the Department of Public Utilities, to provide fishery management and develop public use facilities at 14 park ponds.

Enters into an agreement with the U.S. Forest Service and the Soil Conservation Service, under which Frank A. Hershey will be on special assignment to the Forest Service as State and Private Forestry Watershed/Rural Development Specialist in the states of Missouri and Illinois for a period not to exceed 36 months, effective July 1, 1993.

Introduces a Water Quality Monitoring program and

continues to support the efforts of 443 Stream Teams. Volunteer instructors and Department staff certify 28,914 Hunter Education students.

Distributes 108,000 pounds of wildlife food and habitat seed.

Provides 5.9 million seedling trees to individuals, school children, and communities.

In support of Flood of 1993 efforts and Wetland Restoration Program needs, area biologists add on-site wetland restoration assistance to the training they provide to the Soil Conservation Service.

The Department negotiates the first agreement in the nation that results in Soil Conservation Service reimbursement to a state fish and wildlife agency for fish and wildlife technical assistance (Flood of 1993 wetland restoration assistance). The initial billing resulted in a check from the Soil Conservation Service in the amount of \$45,252 to reimburse the Department for 3,136 hours of technical assistance.

## ADMINISTRATION

Gerald Ross is promoted from state forester to assistant director on July 1, 1992. He holds this position until June 30, 2003.



**Administration: Transplants 100 prairie chickens to north Missouri.**

Marvin Brown is promoted from assistant state forester to state forester on Aug. 1, 1992. He holds this position until Sept. 3, 1999.

Ron Glover is promoted from assistant Protection Division chief to Protection Division chief on June 1, 1993. He holds this position until Jan. 31, 2001.

Implements enhancements in five strategic areas as detailed in the report *Stream Team: Addressing the Need for Public Involvement*: augment Stream Team services, broader constituency marketing, cooperative water quality programs, enhanced stream education, and effective landowner stream teams.

Contracts for construction of phase II development at Ten Mile Pond Wildlife Area, Mississippi County; shooting range facility at Forest 44 Conservation Area, St. Louis County; shooting range facility at Bois D'Arc Conservation Area, Greene County; and ponds and related work on Prairie Home Conservation Area, Cooper and Moniteau counties.

Based on a recent Supreme Court ruling about law enforcement training, revises conditions for issuing law enforcement commissions to Department personnel. Effective Aug. 14, 1992, only those staff who successfully complete a 240-hour law enforcement training course will be issued a Department law enforcement commission.

Confirms the names: Burr Oak Woods Conservation Nature Center, Springfield Conservation Nature Center, Powder Valley Conservation Nature Center, and Runge Conservation Nature Center. Notes that including "Conservation" in nature center names should enhance Department name recognition.

Counts 21 young eagles from 10 nests, and 2,394 wintering bald eagles, up from zero nests and 700–800 wintering birds in the late 1970s.

Establishes six new peregrine falcon nest boxes.

Traps and releases 107 ruffed grouse.

Launches the regional planning concept for Department lands to ensure biological diversity and a comprehensive approach to land management.

Conducts public meetings and tours of the newly acquired 80,000 acres of Ozark land in Shannon, Reynolds, and Texas counties.

Initiates or continues research on restoration programs for running buffalo clover, pondberry, ginseng, Missouri bladderpod, bald eagles, American bitterns, and other birds, alligator snapping turtles, Ozark cavefish, Niangua darters, two species of mussels, and Indiana bats—all threatened or endangered species.

Produces 1,619,000 trout and 15,251,000 warm-water fish (bass, catfish, bluegill, etc.).



Graduates 15 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Moves forward with development of an automated permit system. The Department issues about 1.9 million permits and stamps per year; no other state has an automated permit system, so the Department is breaking new ground; through automation, the proposed system would save an estimated \$1 million per year.

Purchases 23,126 acres, including Star School Prairie Conservation Area in Atchison County. Receives land donations totaling 1,840 acres.

## MILESTONES AND NOTABLE EVENTS

American Fisheries Society presents the Society's Conservation Achievement Award to the Conservation Commission for its Streams for the Future program.

Helps draft and pass a new law prohibiting the digging of wild plants along highway rights of way.

The Missouri Court of Appeals, Eastern District, finds the City of Manchester's ordinance relating to trapping

to be void because it prohibits what the *Wildlife Code of Missouri* permits. The city ordinance prohibited steel traps while the *Wildlife Code* required traps to be metal. The Court notes that the regulation of forest, fish, and wildlife resources is vested in the Conservation Commission and the Commission's authority to prescribe rules and regulations.

The L-A-D Foundation dedicates Rocky Hollow Natural Area in Monroe County to Charlie Callison, editor of the *Missouri Conservationist* and first executive secretary of the Conservation Federation of Missouri. The area is near Callison's boyhood home.

Keith Jackson, Area Biologist, receives the U.S. Department of Agriculture Soil Conservation Service Midwest Biologist of the Year Award—the first time this award is given to someone not employed by the U.S. Department of Agriculture.

Completes construction of the Runge Conservation Nature Center in Jefferson City and refurbishes exhibits at Burr Oak Woods Conservation Nature Center in Blue Springs.

Dispatches 31 staff to fight forest fires in western states.

**Administration:** Manages 679,531 acres of land owned by the Department and 189,461 acres of leased or licensed land.



## CONSERVATION COMMISSION

**Jerry P. Combs**, *chairman*  
**Andy Dalton**, *vice chairman*  
**John Powell**, *secretary*  
**Anita B. Gorman**, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1994 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$64,246,972
Permit Sales .....	\$20,705,235
Federal Reimbursements .....	\$9,211,489
Sales, Rentals, and Leases .....	\$4,227,305
Interest.....	\$776,829
Other Sources .....	\$731,623
<b>Total Receipts .....</b>	<b>\$99,899,453</b>

#### DISBURSEMENTS

Fisheries.....	\$11,353,239
Forestry.....	\$16,761,058
Wildlife .....	\$13,788,621
Protection .....	\$11,362,664
Natural History .....	\$2,940,910
Education and Information .....	\$6,524,195
Administration .....	\$1,151,918
Support Services .....	\$15,302,412
Land Acquisition, Landowner Assistance, In Lieu of Taxes.....	\$5,293,277
Construction and Development .....	\$8,332,546
<b>Total Disbursements .....</b>	<b>\$92,810,840</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Commercial fishers may not possess or transport game fish, including all catfish and paddlefish, on the Missouri River where commercial take of these species is prohibited.

### Hunting and Trapping:

Establishes, effective in 1994, a Nonresident Muzzleloading Firearms Deer Hunting Permit (fee \$100) and a Nonresident Five-Day Trip Small Game Hunting Permit (fee \$25); special managed deer hunts are authorized with several changes in location, elimination of some hunts, and establishments of new ones; beginning in 1994, hunters have the option of requesting a second bonus antlerless-only permit. Establishes prices for the Resident Small Game Hunting Permit and the Migratory Bird Hunting Permit at \$9 and \$4 respectively. Prohibits the use of bait during and 10 days prior to migratory bird, turkey, and deer hunting seasons. Prohibits the use of traps within 150 feet of any residence or occupied building within the boundaries of cities or towns with populations of more than 10,000 people.

### General:

Approves final wording related to confined wildlife; the price for a Class II Wildlife Breeder Permit is set at \$150; and the definition of 'circus' has been modified to include animal acts. Permits the purchase and sale of turkey heads for taxidermy purposes. The Regulations Committee reaffirms its opposition to establishing any special hunts outside the spring firearms turkey-hunting season, and will work through the National Wild Turkey Federation to enlist volunteer guides. Rescinds deer hunting rule (approved May 21, 1993) that established managed deer hunts in Squaw Creek National Wildlife Refuge during January 1994, at the request of the U.S. Fish and Wildlife Service citing extensive flood damage.

## PROGRAMS AND PARTNERSHIPS

Helps Missouri cities and towns plant more than 11,000 trees, and assisted rural landowners in placing more than 42,000 acres of Missouri forestland under management. Stocks more than 23,000 trout in an urban fishing program for city residents in St. Louis and Kansas City. Provides up to \$1 million to Kansas City Parks and Recreation Department and Friends of Lakeside Nature



Center for a new Lakeside Nature Center Building and exhibits in Swope Park.

Conducts a Conservation Honors program that gives 48 of the state's top high school students a week of hands-on training in natural resources management.

Opens display at the St. Louis Science Center and provides \$2 million to enhance educational and interpretive services at the Kansas City Zoo.

Provides \$200,000 for exhibits at the St. Louis Zoo.

Provides \$250,000 to the World Bird Sanctuary of St. Louis.

Authorizes 25-year Community Assistance Program agreements with Sedalia Park Board, Pettis County; Jackson, Cape Girardeau County; the University of Missouri–Columbia; Odessa, Lafayette County; Mineral Area College, St. Francois County; Ballwin, St. Louis County; and Bridgeton, St. Louis County.

Finalizes agreement with Jefferson City for new hangar location and solicits bids for the replacement hangar at the Jefferson City Airport.

Enters into a one-year, annually renewable lease agreement of 963 acres in Mississippi County, adjacent to Seven Island Conservation Area.

Enters into an agreement with the National Wild Turkey Federation to provide \$25,000 annually for three fiscal years (1994–1996) to help fund a new regional director position.

Enters into an agreement with the Soil Conservation Service (SCS) under which Stephen J. Young will be on special assignment to the SCS State Emergency Operations Center in Columbia as Wetland Wildlife Biologist for a period of one year beginning Nov. 1, 1993.

Extends the Department's cost-share incentive to landowners for wetland restoration that complements the U.S. Department of Agriculture's Wetland Reserve Program, through Fiscal Year 1995 sign-ups.

Counts 2,017 wintering bald and golden eagles in the state during an annual count in January, up from 700–800 wintering birds in the late 1970s.

***Programs and Partnerships:*** Stream Team program grows to include more than 24,000 members.







**Administration:** Develops a *Management Plan for the Black Bear in Missouri*. Black bears are native to Missouri, although by the late 1800s they were reported to be almost extinct in the Ozarks. Currently, black bears are listed as rare in Missouri. Bear sightings have been increasing (more than 200 in 1993). The management plan will determine their status and identify potential habitats and critical areas needed for bear population expansion.

## ADMINISTRATION

Pledges \$10 million to buy flood-wrecked acreage in floodplains and seeks matching federal funds. The land, to be used as floodways and wetlands, is only being bought from willing sellers, and the Department will make payments in lieu of taxes to local governments.

Following the Flood of 1993, Conservation Department biologists study the effects of flooding on bottomland trees using aerial and satellite photographs.

Begins Coordinated Resource Management to protect examples of natural communities, such as prairies and

savannas. It will recreate others, such as wetlands, where possible.

Due to extensive flood damage an administrative decision is made to issue hunting reservations only at Swan Lake, Montrose, and Duck Creek areas during the 1993–1994 waterfowl season. Other waterfowl hunting areas will be available for hunting with positions allocated through morning drawings.

Conducts the first stocking of pallid sturgeon, using fish culture techniques refined by Department staff. About



8,000 endangered pallid sturgeons are reared and released into the Missouri and Mississippi rivers.

Begins implementation of a plan to make all Department facilities accessible under the Americans with Disabilities Act guidelines.

Opens the Runge Conservation Nature Center on July 10, 1993.

Approves a revised policy, Water Quality Monitoring and Investigation, identifying the Department's role in activities associated with volunteer water quality monitoring programs in cooperation with other agencies and organizations.

Approves a new policy, Conservation Volunteers, establishing a mechanism for recognition of volunteer efforts based on time or contribution.

Approves a new policy, Cave Management and Recreation, reaffirming the need for special management to protect the unique cave ecosystems on Department property.

Approves the Department's plan, *Conservation Advocacy for Missouri, Proactive Strategies for Conservation, 1992–1995*, and adopts two position statements: *Harvest of Fish, Forest and Wildlife Resources* and *Humane Treatment of Fish and Wildlife*.

Publishes the first in a series of popular *Aquaguides* that offer small impoundment management advice for landowners.

Publishes *About Mammals and How They Live*, a companion volume to *The Wild Mammals of Missouri*. The 191-page book is written by Elizabeth and Charles Schwartz and is illustrated by Charles Schwartz.

The *Conservation Monitor* statewide telephone survey begins, conducted by Gallup, Inc. Similar surveys will be repeated in 1994–1997, 2000, and 2009.

Designates Stegall Mountain Natural Area, a 5,387-acre tract in Shannon and Carter counties.

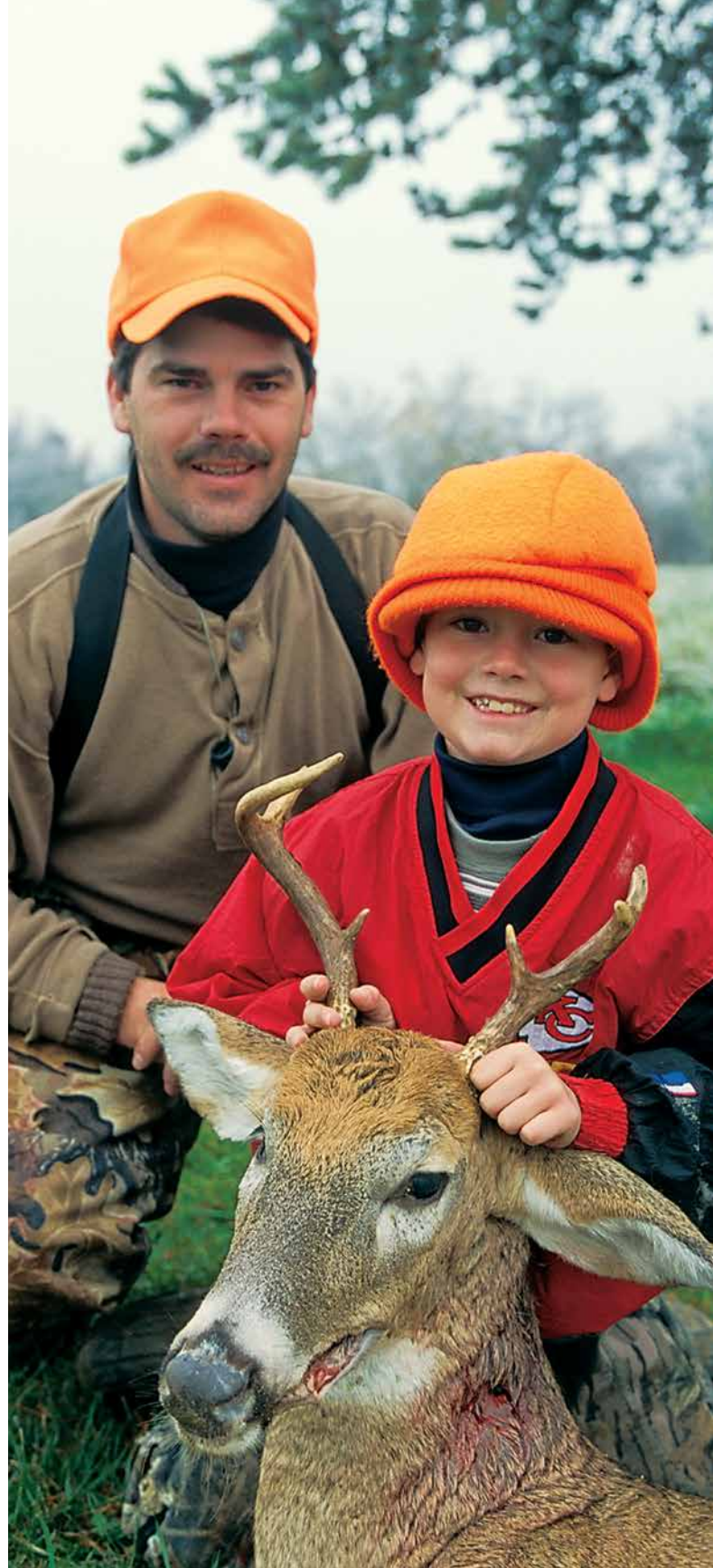
Purchases 16,929 acres. Receives land donations totaling 114 acres. All acquisitions are additions to existing areas.

## MILESTONES AND NOTABLE EVENTS

Visitors to the Department's four nature centers—in St. Louis, Blue Springs, Springfield, and Jefferson City—total 493,500.

The Commission commends Department employees for a job well done during the Flood of 1993 and for their selflessness and steadfastness in the face of difficulties, including flooded facilities, displaced staff, helping with evacuation efforts, and sandbagging communities, and even retrieving coffins floating down the river.

Hunters overcome heavy rains to harvest 155,822 deer during the 1993 firearms deer season, 5,815 more than during the 1992 season.



**Milestones and Notable Events:** Conducts the first youth-only deer hunt in Missouri for young people ages 11–15. Of the 56 youths who participate, 21 harvest deer.

## CONSERVATION COMMISSION

Jerry P. Combs, *chairman\**Andy Dalton, *vice chairman\*\**Anita B. Gorman, *secretary*John Powell, *member*

*\* Jerry P. Combs served as chairman from July to December 1994 and then served as vice chairman from January to July 1995.*

*\*\* Andy Dalton served as vice chairman from July to December 1994 and then served as chairman from January to July 1995.*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1995 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$68,668,633
Permit Sales .....	\$21,509,673
Federal Reimbursements .....	\$12,431,252
Sales, Rentals, and Leases .....	\$5,500,246
Interest .....	\$1,490,061
Other Sources .....	\$1,090,732
<b>Total Receipts .....</b>	<b>\$110,690,597</b>

## DISBURSEMENTS

Fisheries .....	\$12,038,154
Forestry .....	\$15,955,445
Wildlife .....	\$14,974,366
Protection .....	\$11,807,506
Natural History .....	\$3,215,904
Education and Information .....	\$7,573,481
Administration .....	\$1,395,455
Support Services .....	\$18,356,242
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$8,040,558
Construction and Development .....	\$11,606,538
<b>Total Disbursements .....</b>	<b>\$104,963,649</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Reformats fishing chapter to make regulations easier to understand. Anglers will now be able to find length limits, creel limits, etc., within the rule for the applicable species.

Establishes special regulations for smallmouth bass and rock bass on sections of the Jacks Fork, Gasconade, and Big Piney rivers. Earlier angler surveys indicated a willingness to forego "taking a limit" in deference to improving fishing quality.

Establishes an 18-inch minimum length limit for walleye in Norfork and Bull Shoals lakes, consistent with Arkansas regulations.

Standardizes the rule for taking fish by longbow.

## Hunting and Trapping:

Wild turkey joins deer, black bear, and endangered species on the list of wildlife that requires prior approval from an agent before they may be destroyed by landowners for causing property damage.

Prohibits use of night vision equipment.

Amends hunting methods allowing dog training during and prior to the spring turkey and firearms deer seasons—and adds a new definition of "chase or chased."

Establishes hunting season for gray partridge (which have expanded their range into Missouri from adjacent states) from Nov. 1, 1994 through Jan. 15, 1995, in counties open to pheasant hunting.

1994 deer hunting seasons: Firearms deer hunting season, Nov. 12–20. Muzzleloading firearms deer season, Nov. 12–20 and Dec. 3–11. In 1994, scopes will be permitted on muzzleloading firearms. Archery deer (and turkey) hunting season, Oct. 1–Nov. 11 and Nov. 21–Dec. 31, with two deer (and two turkeys) of either sex allowed, provided only one deer (and one turkey) may be taken during the Oct. 1–Nov. 11 segment.

## PROGRAMS AND PARTNERSHIPS

Pays \$494,054 to counties in lieu of taxes and \$334,580 for land in the Forest Cropland program.

Submits to the Governor: *The Report and Recommendation of the Governor's Task Force on Flood Plain Management and Report and Recommendations of the Governor's Task Force on Environmental Education: Creating an Environmentally Literate Citizenry.*

Enters into a 25-year lease agreement with Kirkwood to manage Emmenegger Nature Park in St. Louis County. The park, which adjoins Possum Woods Conservation Area, would be used in conjunction with Powder Valley Conservation Nature Center for interpretation, education, and nature-related recreation.





***Programs and Partnerships:*** Implements incentive package in conjunction with the Partners for Prairie Wildlife program to benefit prairie wildlife, restore prairie habitat and maintain, or even improve, forage or crop production.

Provides a \$500,000 grant for construction of a new natural resources building on the University of Missouri–Columbia campus.

In less than five years, the Department of Conservation, the Conservation Federation of Missouri, and the Department of Natural Resources charter more than 540 Stream Teams, whose combined membership tops 25,000.

Enters into 25-year Community Assistance Program agreements with Mount Vernon, Lawrence County; Ferguson, St. Louis County; Higbee, Randolph County; and a 15-year agreement with St. John's Levee District to develop a public fishing access on the Mississippi River in Mississippi County.

Enters into a 50-year lease with the Platte County Commission for Department use of the county's 188-acre Helen Parma Park to construct the Parma Woods Shooting Range and Outdoor Education Center.

Provides a grant to the Missouri Botanical Garden of St. Louis to design and establish native gardens and exhibits at the Garden and at the EarthWays Home in St. Louis.

Missouri Ducks Unlimited presents \$90,000 grant, earmarked for wetland development for Missouri Ducks Unlimited's 1994 Matching Aid to Restore States' Habitat project, to Four Rivers Conservation Area.

Through the 1994 Charitable Deer Meat Donation program, 236 hunters contribute 3,193 pounds of venison through eight participating charitable organizations.

Approves the guidelines to implement a new Wetland Heritage Cost-Share Program, designed to enable interested landowners to voluntarily restore wetlands on their property. These incentives would be partially funded under the cooperative agreement with the U.S. Fish and Wildlife Service.

Enters into agreements with Martha Lafite Thompson Nature Sanctuary of Liberty, Clay County, to provide a grant toward design and construction of an addition to the existing nature center; and with The Learning Exchange of Kansas City, to provide a grant to develop its EarthWorks project to further understanding of conservation principles among students and teachers in the Kansas City area.

The Department receives funds from Federal Emergency Management Agency (FEMA) for repairs at Ted Shanks Conservation Area, and five other Department areas, due to damage by the Flood of 1993. Reimbursement received from FEMA now totals \$1,064,770, with other claims pending.

Enters into agreement with the U.S. Fish and Wildlife Service to facilitate restoration and management of



**Administration:** Contracts for construction of Brown Bend Access on Lake of the Ozarks in Camden County; for clean up and removal of flood-damaged buildings and debris on a recent addition to B.K. Leach Memorial Conservation Area in Lincoln County; for wetlands developments at Otter Slough Conservation Area in Stoddard County (above); at Coon Island Conservation Area in Butler County; and at Ralph and Martha Perry Conservation Area in Johnson and Pettis counties.

vegetated wetlands, riparian corridors, and prairie wildlife habitats in Missouri. The U.S. Fish and Wildlife Service will provide supporting project funds in the amount of \$350,000 in Federal Fiscal Year 1995 to match Department funds in the amount of \$175,000 in State Fiscal Years 1995 through 1999 (2-to-1 match).

The Department, in cooperation with the Soil Conservation Service, establishes four Wetland Emphasis Teams consisting of a soil scientist and a Department biologist. By working full-time with one another and specializing, they work faster and produce higher quality wetland restorations. The teams prove successful and the Department continues to staff four Natural Resources Conservation Service wetland teams with a biologist and to provide a state-level wetland biologist solely for the delivery of Wetland Reserve Program (WRP) and other U.S. Department of Agriculture wetland programs. The Wetland Emphasis Teams and WRP restorations continue to be recognized nationally.

Begins the first sign-up for the Partners for Prairie Wildlife Program.

Proceeds with participation in Missouri Resources Assessment Partnership and agrees to expend up to \$300,000 toward the initial start-up costs of the project.

Department nursery distributes 4.1 million trees.

Completes the Missouri Natural Features Inventory, which from 1980–1995, consisted of systematic regional

inventories covering all counties to locate, describe, classify, and rank high quality elements of Missouri's natural heritage. This inventory was completed in partnership with The Nature Conservancy.

The Missouri House of Representatives' report from the Interim Committee on the one-eighth of 1 percent Conservation Sales Tax and the one-tenth of 1 percent Soils, Water, and Parks Sales Tax is released. Five options are offered but option number one, which includes no change to the Conservation Sales Tax, prevails.

## ADMINISTRATION

Kathryn Love is promoted from assistant Public Affairs Division chief to Public Affairs Division chief on Oct. 1, 1994. She holds this position until May 31, 1997.

Adds a Geographic Information Systems (GIS)

Coordinator position within Planning Division. This marks the beginning of an increased effort to expand use of GIS technology within the Department.

Designates Carman Springs Natural Area, a 2,810-acre tract in Howell County owned by Mark Twain National Forest.

Continues to purchase flood lands from willing sellers, such as the 1,112-acre Frost Island tract along the Des Moines River in Clark County.



Contracts for construction of a 150-acre, above-ground fishing lake (to later be named Jerry P. Combs Lake) near Kennett in the Bootheel where lake fishing opportunities are limited. The \$2.9 million dollar project will include a boat ramp and will be accessible to persons with disabilities. Suggests changes in management of the flood-prone Missouri River to provide habitat for fish and wildlife while maintaining the commercial navigation channel.

The availability for purchase of the new Conservation Heritage Card is announced in the July issue of the *Missouri Conservationist* magazine, and a direct solicitation for sale of the cards is mailed to 800,000 names on the any-deer and permit book databases.

Adopts position statement opposing the *Hancock II* amendment.

Begins a process to inventory and set management plans for the state's 40 stream basins, with a completion date set for the year 2000.

Creates a Fire Management Coordination Team with representatives from several divisions. The initial charge is to develop a policy that integrates prescribed fire and wildfire issues and considerations.

Enters into a five-year contract with Central Bank for development, installation, and operation of an automated Point of Sale permit distribution and revenue collection system that would be fully implemented by Dec. 1, 1995.

Presents building and site plans for the proposed headquarters complex at the August A. Busch Memorial Conservation Area in St. Charles County, estimated to cost \$4 million. Staff intends to proceed with final design and solicitation of bids, projected in the fall of 1995.

Develops a boat ramp facility design for wheelchair users with disabilities that has served as a national model.

Publishes the book *Missouri Nature Viewing Guide*. The 120-page guidebook features Missouri's most spectacular wildlife and nature-viewing sites.

Publishes *Missouri's Conservation Atlas*, which includes maps of all 114 counties that highlight public lands managed by the Department.

Releases a video *Where Eagles Soar*, about the bald eagle's brush with extinction and its return to the lower 48 states.

Purchases 9,935 acres, including 1,815-acre Long Ridge CA in Franklin County. Receives land donations totaling 115 acres.

## MILESTONES AND NOTABLE EVENTS

A Ripley County conservation agent is seriously assaulted on U.S. Forest Service land during deer season by two deer-dogging suspects. The agent was injured but was able to eventually subdue the two suspects. Both subjects are later charged in federal court.

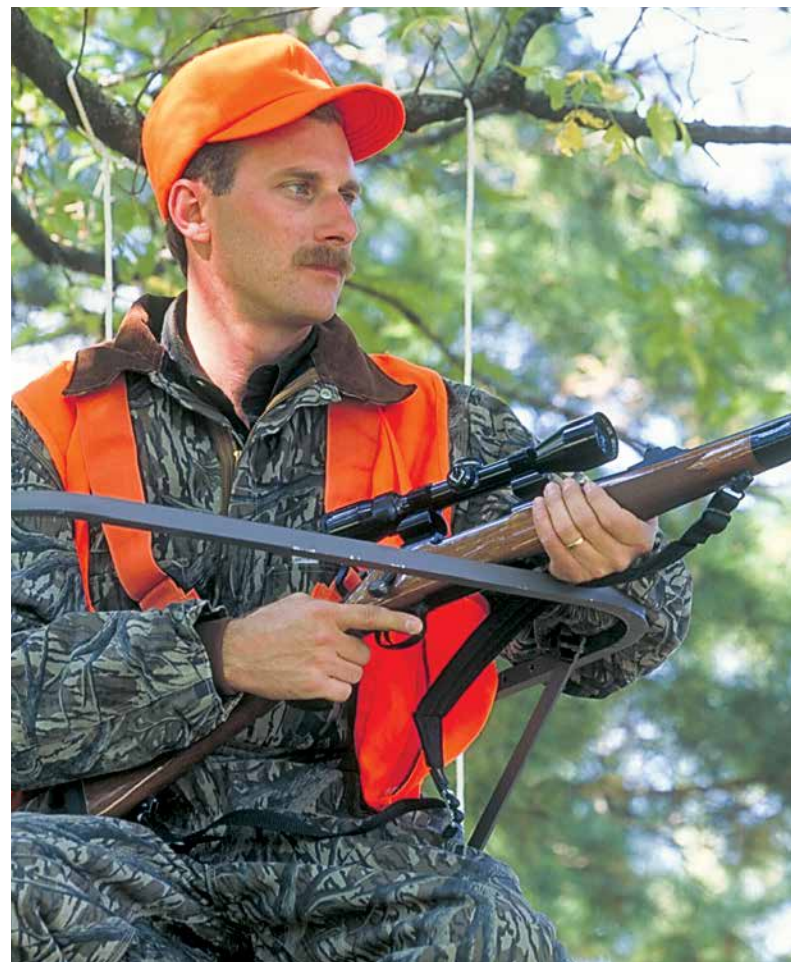
On June 28, 1995, dedicates a new public shooting range facility at the Forest 44 Conservation Area in St. Louis County, soon renamed the Jay Henges Shooting Range and Outdoor Education Center.

Holds celebrations around the state Aug. 17–28, 1994, for Smokey Bear's 50th Birthday.

Engineering Division receives the Association of Conservation Engineers' 1994 Award of Excellence for design of the Eagle Bluffs Conservation Area wetlands development.

Regional Director of the National Wild Turkey Federation, Dave Murphy, presents the Commission with the Federation's 1994 Guardian Life Sponsor Award in recognition of the Department's contributions to wild turkey management and the Federation itself.

Dispatches 45 staff from Forestry Division to fight fires in Idaho, Washington, and Montana.



**Milestones and Notable Events:** In the fall of 1994, celebrates the 50th anniversary of modern deer hunting seasons in Missouri. Deer hunting season was restored in 1944, when the total deer population had rebounded to an estimated 15,000 deer. That first season in 1944, hunters took 564 bucks in the 20 open counties.

## CONSERVATION COMMISSION

Anita B. Gorman, *chairman*

John Powell, *vice chairman*

Ronald J. Stites, *secretary*

Randy Herzog, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1996 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$72,082,941
Permit Sales .....	\$22,551,366
Federal Reimbursements .....	\$16,353,184
Sales and Rentals .....	\$6,767,219
Interest .....	\$1,641,867
Other Sources .....	\$1,511,230
<b>Total Receipts .....</b>	<b>\$120,907,807</b>

#### DISBURSEMENTS

Fisheries .....	\$12,558,877
Forestry .....	\$17,006,580
Wildlife .....	\$16,159,275
Protection .....	\$12,797,576
Natural History .....	\$1,612,049
Education and Information .....	\$10,587,655
Administration .....	\$1,701,988
Support Services .....	\$22,577,596
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$7,611,383
Construction and Development .....	\$21,455,979
<b>Total Disbursements .....</b>	<b>\$124,068,958</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** In fall 1995, the U.S. Fish and Wildlife Service implements the Adaptive Harvest Management program for setting duck regulations in the United States. In the Mississippi Flyway, duck season length and bag limits are now determined by the status of mid-continent mallards and wetland conditions in prairie Canada. Based on this program, Missouri offers a 50-day season with a five-duck bag limit.

### NOTABLE WILDLIFE CODE CHANGES

#### New Permits:

- Resident lifetime conservation partner permit covers all hunting and fishing, except deer and turkey hunting (\$800).
- Resident lifetime fishing permit covers all fishing, including trout fishing (\$400).
- Resident lifetime small game hunting permit covers all small game, including migratory birds, but not deer and turkey (\$400).
- Resident annual wildlife conservation permit covers all hunting and fishing, including deer and turkey (\$70).
- Resident annual all hunting permit covers all hunting, including migratory birds, deer, and turkey (\$57).
- Trout permit replaces the trout stamp (remains at \$6).
- Migratory bird hunting permit replaces the migratory bird harvest information program card (\$4) and is required



in addition to a hunting permit to take waterfowl, doves, snipe, woodcock, and rails.

Daily small game hunting permit (\$5).

#### Fishing:

Minnow traps, hooks, trotlines, throwlines, limb lines, bank lines, or jug lines may not be left unattended for more than 24 hours or must be completely removed.

#### Hunting and Trapping:

Creates new deer hunting units to help control the growing deer population in Missouri's metro areas and liberalizes hunting regulations in some rural units as well.

Archers can take two deer of either sex, except that only one buck can be taken before the firearms season.

Archers may use scopes and quickpoint sights in addition to illuminated sights.

Changes spring turkey season shooting hours to one-half hour before sunrise to 1 p.m.

Two turkeys can now be taken at any time during the archery season.

Extends fall archery deer and turkey season to Jan. 15.

Adds otters to the list of animals that can be trapped during the 1996 season.

Opens beaver trapping in certain watersheds where beaver trapping was prohibited.

Establishes a permit and requirements for operating of hound running areas for training hounds.

Expands the fall 1995 Canada goose season to 70 days statewide with the exception of the Swan Lake and Schell-Osage zones where it remains 40 days. The daily bag limit is two Canada geese. To control harvest of Eastern Prairie Population Canada geese, no more than 30 days of the season could occur after Nov. 30.

#### General:

Launches an automated Point of Sale permit distribution and revenue collection system. There are 1,299 vendors selling or in the process of being set up to sell permits, in addition to 35 Department offices. Processes 154,341 Heritage Card applications as of March 11; that number includes 12,916 Hunter Education training course graduates who are issued a card at no charge.

Permits now valid from March 1 through the last day of February of the following year, rather than on a calendar basis. This change is part of the Department's efforts to streamline the process of buying permits.

Drops the following permits: nonresident three-day and fourteen-day trip fishing permits, the Missouri waterfowl hunting stamp, the ruffed grouse hunting permit, and the nonresident five-day trip small game hunting permit.

No firearms hunting permit shall be issued unless proof of Hunter Education is provided.

## PROGRAMS AND PARTNERSHIPS

Pays \$505,314 to counties in lieu of taxes and \$344,997 for land in the Forest Cropland program.

Missouri Ducks Unlimited presents final project payments of \$35,000 for Coon Island Conservation Area construction in Butler County, and \$70,000 for the Missouri Riverlands Partnership to convert flood-damaged river lands into wildlife habitat—bring Ducks Unlimited payments under its Matching Aid to Restore States' Habitat program to more than \$1 million.

Authorizes a grant of up to \$250,000 to Overland, St. Louis County, to purchase 25 acres to be used as urban wild acres.

Enters Community Assistance Program agreements with the Missouri Department of Mental Health, Saline County; Cassville, Barry County; Mexico, Audrain County; Ozark, Christian County; Bowling Green, Pike County; Bonne Terre, St. Francois County; Maysville, DeKalb County; Potosi, Washington County; Thayer, Oregon County; and with Neosho, Newton County.

Establishes a Corporate and Agency Partnership Program, as an adjunct to the Department's Community Assistance Program.

Provides grant to Ozark Greenways to develop a 10-mile segment of the Frisco Highline Trail and conservation corridor between Willard and Walnut Grove.

Authorizes a grant of up to \$250,000 to the Missouri Wildlife Rescue Center of Ballwin for The Lone Wolf, a wildlife care facility in St. Louis County.

Greatly expands the Share the Harvest program, where deer hunters can pay the processing costs and contribute their deer meat to charitable organizations. Statewide, there are now 38 meat processors and 22 charitable organizations involved in this increasingly popular program.

Stream Team program expands to include 729 teams with 37,000 participants.

Sponsors Quail Academy, an intensive five-day course that focuses on quail biology and habitat management for high-school freshmen and sophomores.

Makes grants of \$1,000–\$10,000 available to local governments, county, state, and federal agencies, public schools, and nonprofit organizations as matching funds for tree management on public lands through the Tree Resource Improvement and Maintenance program.

Joins a project to restore endangered Niangua darters to Brush Creek basin and provides \$118,000 in funding. Raises Niangua darters in a hatchery and releases them in Ozark streams in the Osage River basin.

Counts 24 active eagle nests that fledge 38 birds. Wintering eagles number 2,632, and wintering trumpeter swans are seen at Lake of the Ozarks.



**Programs and Partnerships: Joins the Partners in Flight Bird Conservation Strategy to identify neotropical birds in trouble and establish conservation plans to help them.**

Begins an osprey restoration program at two Missouri lakes. Of eight chicks released, five survive and are doing well when last seen.

Enters into an agreement with the National Fish and Wildlife Foundation (NFWF), and the Natural Resources Conservation Service to enroll additional land in the federal Wetland Reserve Program, and to earmark up to \$1 million of the Department's post-flood land acquisition program to the NFWF Partnership Fund.

Initiates Landowners Assisting Wildlife Survival, an incentive program to provide a late-winter food supply adjacent to permanent hard cover for upland wildlife.

Reports that sales of limited edition *Missouri Giant* art prints of the world record white-tailed buck found in St. Louis County in 1981, total \$21,588. Proceeds benefit Operation Game Thief.

## ADMINISTRATION

Rick Thom is promoted from assistant Natural History Division chief to Natural History Division chief on Jan. 1, 1996. He holds this position until April 30, 2003.

James H. Wilson is promoted from natural history administrator to Education/Interpretation Division chief on Aug. 1, 1995. He holds this position until June 30, 1997.

Establishes a new position of deputy director, to be filled by Commission appointment and to assume duties and responsibilities as determined by the Commission.

Changes division name from Education/Interpretation Division to Education Division, effective April 1, 1996.

Designates Jacks Fork Natural Area, a portion of the Ozark National Scenic Riverways in Shannon County owned by the National Park Service.

Continues the post-flood land acquisition program for an additional five-year period (through 2001) to expend the balance of the \$10 million originally authorized to pursue the long-term goal of acquiring and restoring forest, fish, and wildlife habitat in the floodplains of the Missouri and Mississippi rivers and their large tributaries.

Confirms the names: Warm Fork Conservation Area in Oregon County; Bellefontaine Conservation Area in St. Louis County; Sni-A-Bar Conservation Area in Lafayette County; Dalton Bottoms Access in Chariton County; Boone Cave Conservation Area in Boone County; and Pawnee Prairie Conservation Area in Harrison County.

Contracts for construction of structure replacement at Schell-Osage Conservation Area in St. Clair and Vernon counties; lake project at Happy Holler Conservation Area in Andrew County; Platte Falls Access in Platte County; Cooley Lake Access on the Missouri River in Clay County; Capital View Access on the Missouri River in Callaway County; wetland development at Amarugia Highlands Conservation Area in Cass County; and Muddy Creek improvements at Four Rivers Conservation Area in Vernon County.

Agents arrest a poaching ring responsible for illegally killing hundreds of deer and wild turkeys in Missouri as well as big-game animals in other states.

Adds authority to approve sale of surplus firefighting radios and equipment (4x4s, ¾-ton pickups, and two-ton pickups) to rural fire departments at 50 percent below wholesale value.

Adopts Forestry Best Management Practices, which are a set of guidelines to manage for water and soil quality. It sets standards concerning road building, stream crossings, and other logging activities to prevent siltation into streams, to maintain soil quality, disturb less soil or wildlife, improve appearance, and ensure future resources.

Commission moves forward with Blue Ribbon Panel that will review Missouri's wild turkey management program.

Coordinated Resource Management Plan for the Lower Ozarks receives outcry from citizens, primarily about property rights issues. A campaign of inaccurate information (that the plan is a government effort to take away private property) has been circulated. As a result, there has been significant revision of the first draft of the



Lower Ozarks Plan, and it will again be circulated for further comment.

The monthly progress report on the Point of Sale permit distribution system is briefly summarized as follows: as of May 13, 584,341 permits and 752,466 privileges have been sold with a value of almost \$8.3 million; 206,244 Heritage Cards have been issued, including 18,937 to Hunter Education training graduates; and down time has been minimal since the last report.

Completes plans for the Lost Valley Fish Hatchery in Benton County and submits them to the U.S. Fish and Wildlife Service for its approval for 75 percent reimbursement as a Sport Fish Restoration project. Lost Valley Hatchery is the largest warm- and cool-water hatchery the Department has designed, is estimated to cost \$18 million, and will take two years to construct.

Publishes the book *The Crayfishes of Missouri*. The 152-page book features the habits, habitats, and home ranges of 32 crayfish species. Written by William Pflieger, former Department fisheries biologist and author of *The Fishes of Missouri*.

Produces *Habitactics*, a CD-ROM computer game, to teach kids ages 8–13 about the animals, plants, and habitats of Missouri.

Graduates 12 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases 11,717 acres, including 2,997-acre Marion Bottoms Conservation Area in Cole County. Receives land donations totaling 1,295 acres.

## MILESTONES AND NOTABLE EVENTS

Launches the Department website.

The Missouri Court of Appeals, Western District, affirms the conviction and sentence of an individual found guilty of possessing a deer taken in closed season. The defendant had picked up a fawn and possessed it like a pet. The Court notes that the defendant had no vested proprietary interest in the fawn, as ownership of the fawn was in the State of Missouri.

Director Presley is elected as the 1995–1996 President of the International Association of Fish and Wildlife Agencies.

**Milestones and Notable Events:** On July 6, 1995, dedicates a new public shooting range facility at Bois D'Arc Conservation Area that is renamed the Andy Dalton Shooting Range and Outdoor Education Center.



## CONSERVATION COMMISSION

John Powell, *chairman*Ronald J. Stites, *vice chairman*Randy Herzog, *secretary*Anita B. Gorman, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1997 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$75,372,032
Permit Sales .....	\$27,136,008
Federal Reimbursements .....	\$11,518,329
Sales and Rentals .....	\$5,616,967
Interest .....	\$1,490,728
Other Sources .....	\$1,387,168
<b>Total Receipts .....</b>	<b>\$122,521,232</b>

## DISBURSEMENTS

Fisheries .....	\$13,391,525
Forestry .....	\$18,335,499
Wildlife .....	\$18,217,813
Protection .....	\$14,181,009
Natural History .....	\$1,606,753
Outreach and Education .....	\$12,403,241
Administration .....	\$2,219,345
Administrative Services and Human Resources .....	\$22,116,852
Design and Development .....	\$3,357,803
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$12,846,726
Construction and Development .....	\$11,418,455
<b>Total Disbursements .....</b>	<b>\$130,095,021</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Establishes a 12- to 20-inch slot length limit for rainbow trout on a three-mile portion of Lake Taneycomo, and only permits use of flies and artificial lures.

Reduces daily limit, from three to one, of rainbow and brown trout in several stream segments.

## Hunting and Trapping:

Starting in the fall of 1996, implements January extended season for antlerless-only deer and increases the number of bonus permits available to hunters to encourage a higher deer harvest.

## General:

Residents 65 years of age and older may hunt without permit on licensed shooting areas.

## PROGRAMS AND PARTNERSHIPS

Pays \$604,251 to counties in lieu of taxes and \$330,206 for land in the Forest Cropland program.

Initiates Missouri Forestkeepers Network, allowing individuals and organizations to volunteer with forest health monitoring, advocacy, and education.

Provides \$110,000 in grants to help 35 schools develop outdoor classrooms.

Begins a purple loosestrife control program to help landowners eradicate this aggressive, exotic plant.

The *River Otter Trapping Season Assessment Special Report* notes 1,054 river otters are taken during the 1996 trapping season—the first modern-day season for river otters in Missouri.

Completes the ruffed grouse restoration program, with 5,366 grouse released on 78 sites in 37 Missouri counties during a 38-year period.

Begins the St. Louis Urban Deer Research Project to monitor deer with radio collars to learn more about how they use their habitat.

Restores 8,000 acres of wetlands through the Partners for Wildlife program.

Jointly sponsors, with Johnny Morris Foundation of Springfield, the pilot Outdoor Recreation and Conservation School in Springfield in August 1997.

Authorizes a \$20,000 grant to The World Bird Sanctuary of St. Louis to produce six videos on threatened bird species.

Authorizes a grant of up to \$60,000 to the Henry Shaw Ozark Corridor Foundation to develop a management and planting plan for a 24-mile corridor from Powder Valley Conservation Nature Center to Shaw Arboretum.





***Programs and Partnerships:*** Begins three-year walleye restoration in the St. Francis River above Wappapello Lake by stocking 51,000 fingerlings each year and restricting angling.

Authorizes a grant of up to \$200,000 to The James Foundation of St. James for a nature center addition to the museum at Maramec Spring Park.

Authorizes a grant of up to \$500,000 to Kansas City to construct a Missouri River access and trails on 145 acres between the Heart of America and Paseo bridges.

Authorizes a grant of up to \$306,000 to Gateway Trailnet of St. Louis to conserve Grasso Spring habitat and establish the Grant's Trail Education Area.

Authorizes a \$15,000 grant to the Ozark Regional Land Trust to purchase three acres in Sarcoxie, Jasper County, that contain the entrance to Sarcoxie Cave, which supports a population of state-endangered and federally threatened Ozark cavefish.

Authorizes a \$150,000 grant to Arnold, Jefferson County, to purchase 118 acres for an urban wild acres and outdoor classroom.

Authorizes a grant of up to \$30,000 to the Shady Creek Nature Sanctuary of Webster Groves to purchase property in Webster Groves.

Authorizes a \$20,000 grant to Ducks Unlimited, as a one-time addition to the Department's annual support of wetland conservation projects in prairie Canada, to

recognize the 10th anniversary of the North American Waterfowl Management Plan.

Enters 25-year Community Assistance Program agreements with St. Charles County; Crawford County Commission; Nevada R-V School District, Vernon County; Clarksville, Pike County; Overland, St. Louis County; Chillicothe R-II School District, Livingston County; Van Buren, Carter County; Downing, Schuyler County; amends agreement with St. Louis County Department of Parks and Recreation to develop the Pelican Island Access on the Missouri River; and two agreements to develop public fishing access on Lake Taneycomo in Taney County.

Enters into agreement with the National Wild Turkey Federation to provide \$25,000 annually for three additional years.

Authorizes Commissioner Emeritus Andy Dalton to lead the citizen effort to establish a Missouri fish, forest, and wildlife foundation for the benefit of the Commission and the Department.

Modifies and enhances existing Department-funded Conservation Reserve Program (CRP) incentive program to enable landowners to manage succession of CRP acres to benefit quail, rabbit, and other wildlife.

Approves the Streams for the Future landowner incentive program to keep livestock out of streams and ponds, control streambank erosion, and improve fish and wildlife habitat.

The Share the Harvest program involves 97 meat processors, 71 charitable agencies, and results in the donation of 10 tons of venison.

Enters into a five-year agreement with the Natural Resources Conservation Service and Ducks Unlimited to jointly fund a resource specialist in southeast Missouri to promote reflooding of cropland, particularly rice fields.

Authorizes transfer of 100–150 wild-trapped turkeys per year for five years to the Texas Parks and Wildlife Department. The National Wild Turkey Federation will deposit \$500 in the Missouri State Wild Turkey Super Fund for each wild turkey provided to Texas.

## ADMINISTRATION

The Conservation Commission appoints Jerry Conley as director-designate on Oct. 1, 1996. He assumes the directorship on Jan. 1, 1997. He holds this position until Oct. 31, 2002.

Director Conley embarks on a major reorganization of the Department to streamline operations. He reduces the number of divisions and establishes 10 common regions for field units.

John Smith is promoted from wildlife research supervisor to deputy director on Feb. 21, 1997. He holds this position until Sept. 30, 2007.

David Erickson is promoted from assistant Wildlife Division chief to Administrative Services Division administrator on June 1, 1997. He holds this position until Oct. 6, 2002.

James Poole is hired as Information Management and Technology Division chief on Aug. 1, 1996. He holds this position until June 30, 1997.

Debbie Strobel is promoted from assistant Human Resources Division chief to Human Resources Division chief on May 1, 1997. She holds this position until March 31, 2010.

Norman Stuckey is promoted from Planning Division supervisor to Fisheries Division chief on May 1, 1997. He holds this position until Aug. 31, 2003.

Kathryn Love is promoted from Public Affairs Division chief to Outreach and Education Division administrator on June 1, 1997. She holds this position until Sept. 15, 2002.

Publishes a series of booklets about accessible fishing docks, shooting ranges, and hunting sites. The Department's commitment to meeting Americans with Disabilities Act standards is commended by the U.S. Fish and Wildlife Service.

The Point of Sale permit distribution and revenue collection system shows permits valued at \$23.1 million and 353,911 Heritage Cards are issued as of Dec. 2.

Commission adopts policy to name areas in honor of commissioners emeritus.

The Commission dedicates the Jerry P. Combs Lake on the Little River Conservation Area near Kennett; renames the Upper Big Lake Conservation Area in Mississippi County the Robert G. Delaney Lake Conservation Area; and names a portion of Refuge Pools A and B the Richard T. Reed Unit, in the Ten Mile Pond Conservation Area, in Mississippi County.

Adopts position statement in support of Constitutional Amendment 8.

Rescinds the authority granted to the director to negotiate an agreement related to mineral exploration on Commission lands.

Designates St. Francois Mountain Natural Area, a 7,028-acre area in Iron and Reynolds counties.

Names Mule Shoe Conservation Area (addition), for the 231-acre tract in Hickory County; and White Alloe Creek Conservation Area, for the 66-acre tracts in Platte County.

Graduates 15 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Contracts for construction of the Lost Valley Fish Hatchery in Benton County for \$18,411,000—the largest warm- and cool-water hatchery designed by any state agency.

It is also the largest Sport Fish Restoration project in the country; lake development at Weldon Spring Conservation Area in St. Charles County; Conservation Service Center on the August A. Busch Memorial Conservation Area in St. Charles County; and French Bottom Access in Buchanan County.

Reports that \$600,000 in the current budget for purchase of automated checking devices to use in wildlife check stations has been freed up for other uses, after unsatisfactory performance during pilot leads the Department to defer the use of automated checking devices indefinitely.

Terminates the Department's involvement in the interagency Coordinated Resource Management program. Landowner perception of this program has become distorted beyond repair and the Natural Resources Conservation Service has withdrawn as a participant.

Authorizes the director to delegate execution of all documents on behalf of the Commission without regard to the dollar value; except that, the director or the deputy director shall personally execute conveyances of real property or interest therein, including all easements on conservation areas.

The five-year harvest management strategy for wild turkeys entitled *Wild Turkey Harvest Management Plan, 1998–2002* is submitted, and will be the basis for future





**Administration:** Dedicates Eagle Bluffs Conservation Area, a nationally recognized 4,756-acre conservation area near Columbia that meets some of its water needs with city wastewater.

recommendations and Commission decisions about turkey hunting seasons.

Approves the Commission statement on *General Forest Management Policy and Direction*.

Publishes the *Missouri Breeding Bird Atlas*. Coauthored by Department ornithologist Brad Jacobs and James Wilson, this 430-page book is a first-time effort to capture a snapshot in time of the distribution and relative abundance of Missouri's breeding birds. The study is repeated every few decades to detect changes in distribution and abundance.

Publishes the book *Shrubs and Woody Vines of Missouri*. The 387-page book provides descriptions and illustrations of 170 species of wild vines and native and nonnative shrubs. Written by Don Kurz, former Natural History Division chief.

Produces *The Nature of Trapping* video, which explores the history and modern-day benefits of trapping.

Purchases 30,489 acres, including 11,404-acre Gist Ranch Conservation Area in Texas County. Receives land donations totaling 1,079 acres.

## MILESTONES AND NOTABLE EVENTS

Receives an Emmy for its television show, *Missouri Outdoors*, for a second consecutive year.

The Stream Team program receives the National Wildlife Federation 1996 National Conservation Achievement Award for its achievement in conservation education.

The Department dispatches 24 employees to fight fires in northwestern states.



## CONSERVATION COMMISSION

Ronald J. Stites, *chairman*  
Randy Herzog, *vice chairman*  
Anita B. Gorman, *secretary*  
Howard L. Wood, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 1998 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$78,385,982
Permit Sales .....	\$19,831,777
Federal Reimbursements .....	\$17,588,841
Sales and Rentals .....	\$5,981,168
Interest .....	\$875,167
Other Sources .....	\$2,436,565
<b>Total Receipts .....</b>	<b>\$125,099,500</b>

#### DISBURSEMENTS

Fisheries .....	\$13,230,014
Forestry .....	\$17,305,846
Wildlife .....	\$17,944,737
Protection .....	\$14,207,454
Natural History .....	\$1,758,107
Outreach and Education .....	\$13,381,103
Administration .....	\$1,220,944
Administrative Services and Human Resources .....	\$14,975,108
Design and Development .....	\$9,471,169
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$8,400,802
Construction and Development .....	\$20,654,105
<b>Total Disbursements .....</b>	<b>\$132,549,389</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Establishes seasonal no-fishing zone on the Osage River, below Bagnell Dam; and a year-round no-fishing zone on the Osage River and Lake of the Ozarks below Truman Dam, due to concerns of over-harvesting large catfish. Also, reduces daily limits on channel catfish, blue catfish, and flathead catfish.

Changes definition of trout lures; prohibits use of natural and soft plastic baits in the Current River Trout Special Management Area.

Sets new length limits on black bass at Bull Shoals Lake and Norfolk Lake and reduces length limit on spotted bass at Lake of the Ozarks.

Establishes a new catch-and-release trout fishing area at Roaring River State Park.

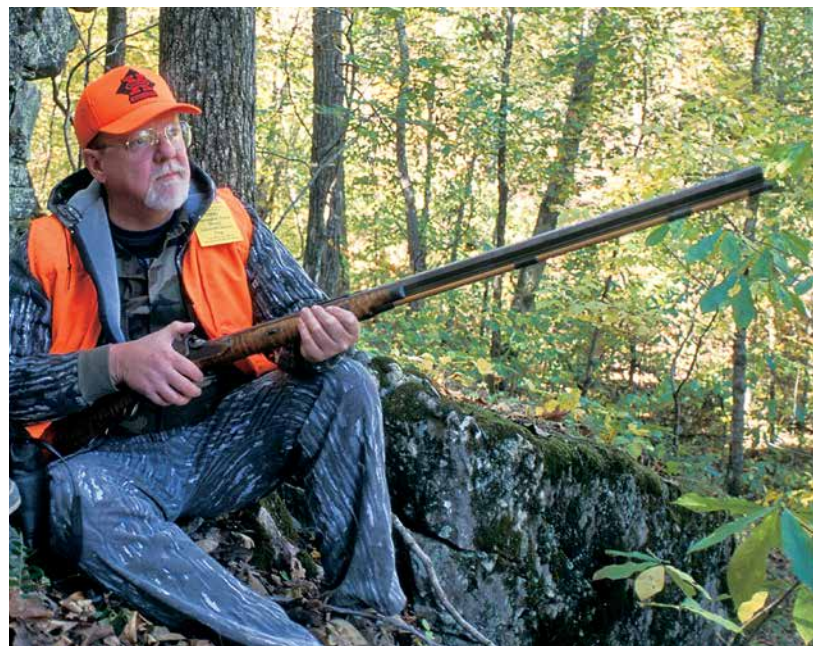
### Hunting and Trapping:

In the fall of 1997, Missouri offers its first 60-day duck season in modern history.

Reinstitutes waterfowl hunting reservation system in 1998, to equitably allocate 50 percent of the available hunting opportunity on the intensively managed wetland areas that conduct daily drawings.

Allows any person—resident or nonresident—who is 15 years of age or younger to take wildlife (except deer and turkey) as provided in Chapter 7 without a permit, to encourage hunting.

**Notable Wildlife Code Changes:** Establishes a new Nonresident Muzzleloading Firearms Any-Deer Hunting Permit.





Reduces the scope of the prohibition against hunting furbearers, squirrels, and rabbits with dogs during daylight hours of the firearms deer season from statewide to only 11 counties.

For deer and fall turkey hunting, a single permit, printed on durable paper, will be issued for each animal and will serve as the transportation tag.

Issues Archery Antlerless permits in the Kansas City and St. Louis areas so that landowners may take up to five additional antlerless deer during the archery season without permit.

Extends spring turkey season from 14 to 21 days for the first time since modern seasons have been held. Missouri's turkey flock has grown from about 2,500 birds in 1952 to a conservative estimate of 600,000 today. The two-bird bag-limit remains in effect, but only one bird can be taken during the first week of the season.

## PROGRAMS AND PARTNERSHIPS

Pays \$646,529 to counties in lieu of taxes and \$314,769 for land in the Forest Cropland program.

Awards more than \$75,000 in grants to help 21 schools develop outdoor classrooms.

Announces formation of the independent Missouri Conservation Heritage Foundation, a nonprofit organization with the goal of supporting the Department in fish, wildlife, and forestry conservation programs.

Establishes Stream Team number 1,000. More than 20,000 stream conservationists now channel thousands of hours of volunteer effort into stream cleanup, water quality monitoring, and other projects.

Through the Managed Deer Hunt program, coordinates 54 managed deer hunts to allow hunters to pursue deer outside of regular hunting seasons.

Participates in evaluating traps used for the majority of furbearer species in the United States. The goal is to find the most humane, effective, and safest traps and to produce guidelines for trappers to follow.

Develops a program to evaluate the capabilities of rural fire departments that would propose equipment needs, possible solutions, and fundraising ideas.

Enters into a Community Assistance Program agreement with St. Joseph, Buchanan County.

Endorses the American National Fish and Wildlife Living Museum and Aquarium proposed in Springfield and authorizes staff to negotiate a contract with the Board of Directors to provide for Department participation and financial support.

Supports the renaming of the auditorium in the new School of Natural Resources building on the University of Missouri campus in Columbia, the I.T. Bode/E. Sydney Stephens Conservation Hall to recognize the contributions of

the Department's first director and one of the original Commissioners.

Develops a Walleye Initiative, the first coordinated statewide walleye management approach. The major goals are to intensify and expand walleye management, identify priority lakes and rivers, increase hatchery production, and provide better walleye fishing and harvest opportunities. The initiative establishes stocking guidelines and schedules to better utilize hatchery production.

## ADMINISTRATION

Creates the Agriculture Services Unit as a result of collaboration among all resource Division leadership (with Wildlife Division Chief Ollie Torgerson leading discussions) in order to strengthen Department interactions with private landowners, rural communities, and agriculture. The Unit is organized to link with private land partners at the state, regional, and local levels as well as to help foster the availability of generalist technical assistance services (across division lines) to private landowners.

Authorizes staff to conduct future timber sales valued at up to \$150,000. Any timber sale valued in excess of \$150,000 would continue to be presented for Commission consideration.

Adopts a position statement regarding requests for Commission funds and establishes procedures for commitment of Commission funds for capital improvements.

Approves the design for the Discovery Center in Kansas City, estimated at \$9.6 million, with the understanding that the Commission's commitment is limited to \$4 million. Staff to pursue partnership funding to complete this project.

Establishes an exotic plant policy that commits the Department to using only plants indigenous to Missouri on land it owns, leases, or manages to stop aggressive exotic or non-indigenous plants from displacing native flora.

Establishes a new forest management policy designed to ensure recreation, forest products, and stewardship of the state's forest-based resources into the 21st century.

Dedicates Cooley Lake Access. This boat ramp design for users with disabilities has been established by the U.S. Fish and Wildlife Service regional office as a model for use by other states.

Discusses lands acquired along the Missouri and Mississippi rivers following the 1993 flood. Following the flood, the Commission redirected \$10 million for purchase of 20,000 acres of flood-impacted land. More than 15,000 acres have been acquired utilizing the federal Wetlands Reserve and Emergency Wetland Reserve programs, and will be managed as part of the natural riverine system and as flood storage areas. The U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers are also

purchasing flood-impacted lands. When acquisitions are completed by all agencies, the total lands of this type on the state's portion of the Missouri River will make a major landscape difference in the river's ecosystem.

Begins suspending hunting and fishing permits of individuals deemed not to be in compliance with applicable child support laws.

Establishes a post-offer, pre-employment drug testing program for all employment (salaried and hourly) effective Jan. 1, 1998; and effective May 1, 1998, a post-accident drug testing program.

Approves a new policy to avoid the use of Commission lands by private developers as mitigation sites to fulfill their state and/or federal permit requirements.

Discusses Department elk restoration feasibility studies. Notes that a resolution, adopted by the Conservation Federation of Missouri, recommends a study be conducted to assess biological and sociological impacts of restoration, and private funding for such a study may be available.

Notes permit fee adjustments. For a period after passage of the conservation sales tax, permit sales made up 25 percent of the total Department revenue. That ratio has been declining in recent years and is currently at 20 percent. The Regulations Committee recently developed a triggering mechanism to assure a comprehensive review of permit fees whenever that ratio drops below the long-term average for two consecutive years.

*The Urban Goose Task Force Report, Responding to Urban Goose Problems in Missouri*, shows the population of giant Canada geese in Missouri, currently estimated at 44,800, has grown about 9 percent annually in recent years. This has increased goose problems, particularly in St. Louis and Kansas City. Management control approaches are recommended to maintain goose populations at levels that satisfy public desires to enjoy the birds, while limiting the problems created by excessive geese. Nonlethal control methods will have to be ongoing to be effective, and the lethal control methods may be extremely controversial in some areas. The implementation will be carefully coordinated to assure public understanding of the health and welfare problems caused by geese, control methods to be used, and benefits.

*The Missouri Waterfowl and Waterfowl Hunting: An Evaluation of the Waterfowl Hunting Program on Missouri Department of Conservation Wetland Areas* report details Missouri's loss of more than 87 percent of its 4.8 million acre wetland habitat base, and how that loss has forced wetland managers to carefully balance resource and recreation objectives on relatively small areas of wetland habitat. Objectives for the waterfowl hunting program include: offer a diversity of hunting styles; ensure quality hunts; use morning drawings as an opportunity to educate hunters; provide opportunities for novice hunters; promote hunting ethics; and provide equal opportunity for all hunters.

**Administration:** Schedules four Eagle Days events designed to enable visitors to see the birds in their natural habitat. In recent winters, as many as 2,600 eagles have been counted in Missouri.







**Administration:** Receives update on dove management. Missouri has 46,000 dove hunters, who hunt an average of four to five days each year and harvest 18 to 20 birds per season, for a statewide total harvest of 833,000 doves. Conservation areas statewide accommodate about 25 percent of local hunting pressure. In 1997, the Department managed 3,000 acres primarily for dove hunting on 50 conservation areas. Dove hunting on most conservation areas is under statewide regulations, but special regulations are established on seven areas where unusually high hunter participation created safety concerns. The most intense hunting pressure occurs on the James A. Reed Memorial Wildlife Area, where 4,000 doves were taken on opening day last fall.

In 1998, 1,530,156 resident and nonresident fishing permits and tags of all types were issued to 926,357 people.

Renames the 37,440-acre area in northwest Shannon County the Sunklands Conservation Area. It is the Department's second largest area and is 99 percent forested.

Accepts a gift of more than 900 acres in Clinton County; and a gift of 2,281 acres in Benton County as an addition to Mora Prairie Conservation Area.

Purchases 11,247 acres, including 4,318-acre Columbia Bottom Conservation Area in St. Louis County. Receives land donations totaling 785 acres.

## MILESTONES AND NOTABLE EVENTS

Legislation passes that expands the law enforcement authority of conservation agents to give them full arrest authority incidental to the agent's authorized duties; and to arrest anyone who uses physical force to create a substantial risk of serious injury or death to others.

Reports Statute 252.230 has been amended to increase penalties for most wildlife violations to Class A

misdemeanor status, making the penalty range for most violations a fine of up to \$1,000 and/or one year in jail.

A judge for the U.S. District Court for the District of Columbia grants summary judgment in favor of the defendants, U.S. Secretary of the Interior Bruce Babbitt and U.S. Fish and Wildlife Service Director Jamie Rappaport-Clark, in a case where animal rights groups sought to stop the export of Missouri otter pelts. The court rightly pointed out that authority for managing Missouri's wildlife resides with the Conservation Commission.

The Missouri Hunter Education Instructors Association creates a Missouri Hunter Education Hall of Fame. Retired Department Hunter Education Administrator Bud Eyman is the first inductee, posthumously.

Estimates that turkey hunters boost the state economy by more than \$35 million annually. Turkey hunting related expenses generate nearly \$1.5 million in state sales taxes and about \$1 million in state income taxes. Those expenditures also support 1,100 jobs statewide.

## CONSERVATION COMMISSION

Randy Herzog, *chairman*Anita B. Gorman, *vice chairman*Howard L. Wood, *secretary*Ronald J. Stites, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 1999 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$82,340,252
Permit Sales .....	\$26,222,753
Federal Reimbursements .....	\$14,237,450
Sales and Rentals .....	\$6,213,425
Interest .....	\$1,019,530
Other Sources .....	\$1,523,430
<b>Total Receipts .....</b>	<b>\$131,556,840</b>

## DISBURSEMENTS

Fisheries .....	\$11,744,191
Forestry .....	\$12,969,340
Wildlife .....	\$13,878,917
Protection .....	\$13,409,321
Natural History .....	\$1,730,597
Outreach and Education .....	\$9,952,392
Administration .....	\$3,139,914
Administrative Services and Human Resources .....	\$20,181,902
Design and Development .....	\$8,532,135
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$7,673,439
Construction and Development .....	\$11,349,291
<b>Total Disbursements .....</b>	<b>\$114,561,439</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Modifies the no-fishing zone on the Osage River and Lake of the Ozarks below Truman Dam to further restrict large catfish harvest.

Opens significant tributaries of the Meramec and Current rivers trout special management areas to fishing with all lures and baits.

Allows persons with disabilities to fish by methods not described in the *Wildlife Code* if the disability prevents fishing by prescribed methods.

Aligns closing date of the winter snagging, snaring, and grabbing season for fish with the closing date of the gigging season. Effective March 1, 1999, the season will close Jan. 31.

A daily tag at Montauk, Bennett Spring, and Roaring River state parks, and Maramec Spring Park, where trout are stocked daily, is \$3; the tag is \$2 for anglers 15 years of age and younger. A winter no-creel trout permit is \$5.

## Hunting and Trapping:

Allows resident and nonresident deer hunters to use either a modern firearm or a muzzleloading firearm on a single permit—no longer requiring them to choose prior to the season.

Changes prices for many permits. The increase in nonresident permit fees reflects the need to maintain parity with respect to what Missouri hunters are charged for nonresident permits in other states.

Provides nine days of additional firearms deer season in December.

Significant changes in the deer hunting seasons include: the January extension of the antlerless-only portion has been lengthened from two to four days; Any-Deer and Bonus Deer Permits will be available on an open quota basis in many units; for landowners, property will no longer have to be contiguous, just located in a single deer management unit, to qualify for Any-Deer and Bonus Deer Permits.

Eliminates the prohibition against possession or storage of venison after Aug. 31.

Revamps the waterfowl hunting reservation system on some conservation areas to offer a diversity of hunting styles and ensure a quality hunt.

Closes the gray partridge hunting season due to insufficient populations.

Establishes that the permit itself is the transportation tag for turkey hunting and deletes the requirement for notching the permit to validate the harvest. This makes turkey-checking requirements the same as for deer.

Modifies the fall firearms turkey bag-limit of two turkeys, so that no more than one turkey may be taken during the first seven days, and no more than one turkey may be taken per day during the remainder of the season.



Opens 24 additional counties to bobcat harvest.  
Provides hunters additional opportunities to pursue coyotes (conducive to dog training activities)—at night during, prior to, and including spring turkey season.

General:

Authorizes wildlife breeders to sell dressed and processed quail, pheasant, partridges, and game bird eggs at retail and to commercial establishments; and allows dressed and processed quail, including bobwhite quail, to be bought, sold, and possessed by commercial establishments.

## PROGRAMS AND PARTNERSHIPS

Pays \$617,501 to counties in lieu of taxes and \$295,264 for land in the Forest Cropland program.

The Department purchases a one-of-a-kind trailer-mounted aquarium to create a Show-Me Missouri Fish Mobile Aquarium. The 40-foot trailer carries a 7-foot-tall aquarium that holds 3,200 gallons.

The Stash Your Trash program distributes 200,000 bags to 130 canoe liveries statewide—double what was sent out the previous year.

Holds three Common Ground Forums in the St. Louis area, to help citizens, city officials, and developers work together to ensure that outdoor resources continue to contribute to the quality of life in urban areas.

Enters into agreement with the U.S. Army Corps of Engineers for construction of Golden Valley Shooting Range.

The Agriculture Services Unit and Forestry Division staff work with the Natural Resources Conservation Service to establish the first Environmental Quality Incentives Program (EQIP) project in the nation to address forest resources—the Headwaters EQIP project in the southeastern Ozarks.

Provides \$10,000 to the Grasslands Coalition for start-up costs and as a demonstration of support that can be used to leverage other contributions.

For the first time in Department history, the Missouri Development Finance Board authorizes \$800,000 in tax credits over a two-year period for contributions to the Discovery Center in Kansas City.

Provides \$25,000 to the Missouri Botanical Garden to support the 16th International Botanical Congress scheduled for August 1999, in St. Louis.

The Stream Team program grows to 1,212 teams with more than 35,000 members.

The Department becomes the first charter organization in the formation of the Audubon Missouri office of the National Audubon Society.

Shelter Insurance Companies agree to pay \$20 toward the deer processing cost for each hunter who donates a whole deer to the Share the Harvest program.



### **Notable Wildlife Code Changes: Adds greater prairie chicken to the state endangered species list.**

Reports on the Missouri Wetland Management Plan, developed in 1989 as part of the Department's implementation of the 1986 North American Waterfowl Management Plan, a blueprint for the recovery of waterfowl in the United States. Waterfowl populations have rebounded to numbers not seen in 20 years. In conjunction with federal programs and initiatives, more than 120,000 acres of bottomlands in public and private ownership have been added in Missouri—70,000 acres in the Wetlands Reserve Program and 50,000 acres in post-flood acquisitions. The mission for future wetland management is to provide a diversity of habitat conditions consistent with site suitability by restoring the physical integrity of wetland basins and restoring/emulating the timing and nature of flooding.

Highlights from the first year of the Private Land program include development and adoption of a *Landowner Assistance Guide* by state and federal agencies that indexes available assistance programs; promotion of Buffer Initiatives through partners; joint development of *Habitat Appraisal Guides* with the Natural Resources Conservation Service (NRCS); administration of a partnership with the U.S. Fish and Wildlife Service to improve management of prairies (900 acres) and wetlands (506 acres); and



**Programs and Partnerships:** Sen. Kit Bond and Rep. Karen McCarthy's efforts pay off when Congress appropriates \$500,000 for the Discovery Center. A total of \$3.4 million in private donations has been raised. The facility will be the nation's first urban conservation education center.

establishment of joint training programs with employees of Soil and Water Conservation Districts, and the NRCS. In addition, joint staffing ventures have resulted in the assignment of Department area biologists in the NRCS field offices and the employment by NRCS of wildlife conservationists who are assigned to the six Openlands Initiative geographies and emphasize one-on-one work with interested landowners. These joint ventures have resulted in more than 20,000 acres of private land being identified and designed to promote forest, fish, and wildlife benefits.

Develops In Lieu Fee program to mitigate adverse impacts to stream resources by activities authorized under Section 404 permits of the Clean Water Act and pursues establishing, with the Missouri Conservation Heritage Foundation, a Stream Stewardship Trust Fund as the repository for voluntary donations as mitigation alternatives.

Creates the Professional Timber Harvester Training program to help develop and improve loggers' use of best management practices to protect Missouri soil and water resources, in partnership with the Missouri Forest Products Association.

The Department, in partnership with the Missouri University Fire and Rescue Training Institute, hosts the first Midwestern Fire Academy, thereby helping to train rural and wildland firefighters from throughout the Midwest.

Creates the Tree Resource Improvement and Maintenance cost-share grant program, also known as TRIM, to assist communities develop sustainable community forestry programs using nationally accepted standards.

## ADMINISTRATION

Establishes a distribution center at Department headquarters. States the Department has an obligation to develop what it buys, and it may now be more appropriate to depend on donation of land rather than direct purchase, except for priority habitats.

Completes Watershed Inventory and Assessment reports on about half of the state's 40 river basins, to support the Department's comprehensive stream management program, Streams for the Future.

Grants a variance to the Department's urban deer management guidelines—currently under staff review—for the City of Town and Country to use relocation as an experimental technique in reducing the city's deer population, with the city assuming all costs.

Contracts for construction of Phase II of August A. Busch Memorial Conservation Area Headquarters and Visitor Center project in St. Charles County; three access projects (Chalk Bluff Trail Access in Dunklin County, Aquilla Access in Stoddard County, and Dan River Access in Butler County); and wetland developments on Settle's Ford Conservation Area in Bates and Cass counties.

Enters into 99-year lease agreement with the Conservation Employees' Credit Union for the purpose of constructing and operating its own office building and parking lot.

Approves the name Pilot Knob Conservation Area for the 1,360-acre tract in Stone County acquired from the U.S. Forest Service as part of a land exchange.



Approves a revised area trail development policy to provide guidelines that address trail categories, planning, and an approval process for new construction and improvement projects; new horses and bicycles policy; and revised area planning policy to implement Regional Management Guidelines and Regional Coordination Teams.

Missouri Supreme Court overrules two motions for rehearing *Conservation Federation of Missouri et al. v. Richard A. Hanson et al.*—thereby determining that the Department is exempt from Hancock Amendment (Article X).

Establishes the crime of leaving the scene of a shooting, including a hunting accident, and removes the provision for expanded judicial review of revocation of hunting privileges.

Restores osprey populations to several Missouri lake areas through a process known as hacking and introduces young peregrine falcons from tall buildings in Springfield and Kansas City. Eagles are successfully reproducing at dozens of nests around the state. These birds of prey had virtually disappeared from Missouri by the 1960s.

**Administration:** Produces 9,246,523 fish for stocking in various waters.



The Department issues 1,494,924 resident and nonresident fishing permits and tags of all types to 909,026 people. Manages 846 public impoundments totaling 276,918 acres. Publishes the major revision to volume 1 of Steyermark's *Flora of Missouri* in cooperation with the Missouri Botanical Garden. The 991-page encyclopedic reference describes 801 species. Written by Department botanist George Yatskievych.

The major water leakage problem at the recently constructed Jerry P. Combs Lake near Kennett receives national television coverage on NBC Nightly News. The Department embarks upon a successful repair of the lake project in 1999.

Begins using the Global Positioning System, known as GPS, in land surveying for design and construction projects thereby greatly increasing productivity and efficiency in open terrain surveys.

Purchases 95 acres. Receives donations of 2,216 acres, including 1,728-acre Linscomb Wildlife Area in St. Clair County.

## MILESTONES AND NOTABLE EVENTS

Jan. 21, 1999 marks the 750th official meeting of the Commission since its creation by the voters of Missouri in 1936, and its founding on July 1, 1937.

Wildlife Research Supervisor Larry Vangilder receives the Agency Partnership Award on behalf of the Department from the National Wild Turkey Federation.

The Missouri Supreme Court rules in favor of the Conservation Federation of Missouri, finding that the General Assembly could not divert conservation sales tax proceeds for Hancock Amendment refunds because doing so would prevent such monies from being used or expended for permissible conservation purposes pursuant to Article IV, Section 43 of the Missouri Constitution, and that revenue from the conservation sales tax is not includable in Total State Revenues.

First person charged under a new Missouri law is given a \$400 fine and a suspended 30-day jail term for leaving the scene of a shooting after accidentally shooting another hunter while turkey hunting at Davisdale Conservation Area. He helps the victim to his vehicle and then leaves without identifying himself.

Recognizes the 25th anniversary of the Endangered Species Act and endangered species work in Missouri.

Recognizes the 10th anniversary of the Springfield Conservation Nature Center. More than 1.1 million visitors have visited the building and more than 2.2 million have walked the trails. Building visitation averages nearly 114,000 annually.

Dispatches 12 employees to fight fires in Florida.

## CONSERVATION COMMISSION

Randy Herzog, *chairman*

Anita B. Gorman, *vice chairman*

Howard L. Wood, *secretary*

Ronald J. Stites, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2000 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$86,885,502
Permit Sales .....	\$28,830,432
Federal Reimbursements .....	\$13,917,026
Sales and Rentals .....	\$7,025,865
Interest .....	\$1,879,082
Other Sources .....	\$2,372,322
<b>Total Receipts .....</b>	<b>\$140,910,229</b>

#### DISBURSEMENTS

Fisheries .....	\$13,180,726
Forestry .....	\$14,028,436
Wildlife .....	\$14,566,820
Protection .....	\$15,383,151
Natural History .....	\$2,101,983
Outreach and Education .....	\$11,570,355
Private Land Services .....	\$3,264,934
Administration .....	\$3,648,058
Administrative Services and Human Resources .....	\$29,357,383
Design and Development .....	\$9,349,998
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$10,524,618
Construction and Development .....	\$17,693,355
<b>Total Disbursements .....</b>	<b>\$144,669,817</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** Allows youth under the age of 11 to purchase a Youth Deer and Turkey Hunting Permit and to hunt while under the direct supervision of a licensed, Hunter Education-certified, adult hunter. Previously, young people under 11 years of age were not allowed to purchase firearms deer and turkey hunting permits.

### NOTABLE WILDLIFE CODE CHANGES

#### Fishing:

Sets a 34-inch minimum length limit for paddlefish on Lake of the Ozarks, Truman Lake, and their tributaries.

Creates a statewide, 15-inch minimum length for walleyes and saugers. A number of other lakes and rivers have minimum length limits of 18 inches.

Expands smallmouth bass special management areas on Big River and establishes smallmouth special management areas on the Eleven Point River and on Mineral Fork, Osage Fork, and Ten Mile Creek.

Missouri anglers now have reciprocal fishing privileges on the Missouri River with the State of Nebraska.

Extends existing waiver of fishing permit requirements for resident veterans with 60 percent or greater service-related disability to also include hunting privileges and waives hunting and fishing permit requirements for resident veterans who were prisoners of war during their military service.



#### Hunting and Trapping:

- Establishes the Managed Deer Hunting Permit as a completely separate permit. It becomes the only permit necessary to participate in a managed hunt. Previously, managed hunts required an any-deer permit. This change leads to a significant increase in managed hunt participation.
- Light goose conservation order closes the light goose (blue, snow, and Ross') season on Feb. 1, 2000 in all zones and establishes a statewide extended draw (Feb. 1–April 30) under which individuals with valid migratory bird hunting permits may take these light geese. Populations of light geese have grown to record levels and control is intended to protect arctic breeding ground habitat from overuse by geese. Hunters can use electronic calls and unplugged shotguns and shoot from one-half hour before sunrise to one hour after sunset.
- Effective March 1, 2000, allows the public to purchase hunting (except deer and turkey), fishing, and trapping permits by telephone or—for the first time—by using the Web. Customers receive a temporary authorization number that enables them to immediately participate in their sport without having the paper permit in hand.
- Closes hunting and trapping for weasels due to low populations.

#### General:

- Due to several mountain lion sightings, states that mountain lions attacking or killing livestock or domestic animals, or attacking humans, may be killed without prior permission but must be reported immediately to an agent and the mountain lion carcass must be surrendered within 24 hours.

## PROGRAMS AND PARTNERSHIPS

- Pays \$639,004 to counties in lieu of taxes and \$312,825 for land in the Forest Cropland program. Since 1980, more than \$7.7 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.
- Sponsors the first Lek Trek in partnership with the Grasslands Coalition to heighten awareness about Missouri's grasslands. During the three-month event, sponsored trekkers hike sections of a 565-mile route through western Missouri, passing numerous leks, or flat, open areas where prairie chickens perform their spring mating dance.
- The Show-Me Missouri Fish Mobile Aquarium program begins with a limited schedule. For the next seven years, staff take it to schools, fairs, and events throughout the state, sparking tremendous interest in the state's aquatic resources.
- Distributes 4.8 million seedlings for planting to nearly 12,500 landowners.
- The Commission enrolls its forested lands, 594,000 acres, in the Sustainable Forestry Initiative.
- More than 1,850 volunteer instructors, and Department staff, conduct 994 Hunter Education courses and certify more than 30,000 students.

- Negotiates with the Department of Natural Resources (DNR) for that agency to provide the state's portion to match federal funding of boat ramp construction in areas where both agencies would benefit. DNR to supply \$334,000 toward two access developments, on Big River in Washington State Park and on Meramec River at Route 66.
- The Governor's Chip Mill Committee is formed in response to two high-capacity chip mills moving to the state.
- Repeats the *Conservation Monitor* telephone survey.

## ADMINISTRATION

- Establishes new Private Land Services Section, which was quickly elevated to division status.
- George Seek is promoted from Wildlife Regional Supervisor to Private Land Services Division chief on Nov. 1, 1999, to lead the newly formed division. He holds this position until Aug. 31, 2003.
- Upgrades Natural History Section and Human Resources Section to division status.
- The new Private Land Services Division is fully staffed and operational by July 1, 2000. Most staff co-locates with U.S. Department of Agriculture in Soil and Water Conservation District Offices in order to convey the Department message to private landowners directly as well as through staff of related agencies. Private Land Services Division is the first of its kind in the nation among state fish and wildlife agencies (a division fully dedicated to private land including community conservation in urban areas).
- Robert Krepps is promoted from forestry field programs supervisor to Forestry Division administrator and State Forester on Nov. 1, 1999. He holds this position until Dec. 31, 2005.
- Completes Regional Management Guidelines for 10 Department regions.
- Opens Jerry P. Combs Lake at Little River Conservation Area, creating valuable public fishing opportunities for anglers in Dunklin County and in surrounding Bootheel communities.
- Produces 3,660,117 warm- and cold-water fish for stocking in various waters.
- Opens the Lost Valley Fish Hatchery.
- Manages 849 public impoundments totaling 277,055 acres of water.
- The Department issues 1,458,418 resident and nonresident fishing permits and tags of all types to 899,008 people.
- Adds the snuffbox mussel to the state endangered species list.
- Discovers a cave crayfish species previously unknown to science. This is the first blind species of the genus *Orconectes* discovered west of the Mississippi River.
- Contracts for construction of the Carl R. Noren Access on the Missouri River in Callaway County.

Approves a new white-tailed deer management on urban lands policy, which defines the Department's role and guiding principles in urban deer management that follow consistent and ecologically sound management practices and involves all affected individuals and groups in the decision-making process.

Presents a status report on the elk reintroduction feasibility study, which includes two segments—a biological assessment, which has been completed, and a socioeconomic assessment, which should be completed early next year. The biological assessment shows there are ten counties in southeastern Missouri that could support elk. Results of a statewide landowner attitude survey show 64 percent favor an elk restoration program in remote areas south of the Missouri River, while 71 percent of landowners in the ten counties identified as potential release sites favor the restoration program.

Contracts for construction of the urban conservation campus, discovery center, and metro office in Kansas City, Jackson County; wetlands development on Nodaway Valley Conservation Area, Andrew and Holt counties; Parma Woods Shooting Range and Training Center in Platte County; and Ozark Regional Office Complex in West Plains.

Habitat restoration is underway at the Ted Shanks

Conservation Area, which had 90-percent tree mortality due to the 1993 flood. Goals include restoring bottomland forest habitat; conducting habitat management necessary to convert wooded wetland habitat to herbaceous wetlands, and achieving an acceptable level of waterfowl hunter success.

A computerized system goes online to track and quantify the severity of multiple wildlife violations. Based on the severity of violations and timing of convictions, the process to suspend or revoke hunting, fishing, and trapping privileges is initiated. This system allows a consistent way to track chronic *Wildlife Code* violators.

Graduates 22 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Adopts an urban deer management policy to address concerns about increasing deer populations in urban areas. It provides guidelines for forming cooperative partnerships with urban and suburban landowners and municipalities.

Reports that four days of wildfires burned about 16,000 acres in the West Central Region, involving some homes and structures. Working through the State Emergency Management Agency and State Fire Marshall, the Department receives federal grant reimbursements for

**Administration:** Department fisheries biologists launch a flathead catfish population study using tagged fish, to determine what percentage are harvested by anglers in the Missouri River. Data will provide better understanding of catfish populations in the river and, ultimately, improve fishing.





some of the fire suppression expenses. This marks the first time in Department history that the Department has received such reimbursement.

Reduces fleet of vehicles by 50 units across the state, at a savings of \$1 million.

Notes that budget for next fiscal year includes an increase of 31 percent in construction and development, and a healthy decrease in land acquisition, which is a reflection of Hancock funds being released to help pay off Four Rivers Conservation Area acquisition early.

Publishes the book *Birds in Missouri*. The 375-page book features color illustrations of 354 birds and includes range maps and seasonal abundance graphs. Written by Brad Jacobs, the Department's ornithologist.

Purchases or receives in trade 5,795 acres. Receives land donations totaling 594 acres, including 315-acre Russell, Hazel, and Arnold VanDyke Conservation Area in Mercer County.

## MILESTONES AND NOTABLE EVENTS

On June 30, dedicates the Carl Noren Access on the Missouri River in Jefferson City, honoring former Director Noren.

Celebrates the 50th Anniversary of the Federal Aid in Sport Fish Restoration Act. Sport fish and restoration funds are generated by a 10 percent tax on fishing supplies and a 3 percent excise tax on pleasure boats and sonar devices. Revenues provide 75 percent of the funding of state projects, such as enhancing fish habitat, boating access sites, fishing education programs, and research projects to improve fisheries management. Missouri's share of Federal Aid in Sport Fish Restoration money averages about \$7.8 million annually.

Celebrates *Centennial Forests, 100 Years of Professional Forestry*. This year-long event highlights the milestones of forestry management in Missouri, from the pioneer period to the modern era of scientific management.

Department personnel confirm an active osprey nest atop a utility pole in the Deepwater arm of Truman Lake. Due to the effects of DDT, ospreys had disappeared from Missouri for decades. From 1994–1998, with help from partners such as Kansas City Power and Light Co., the Department imports young ospreys from upper midwestern states where breeding populations still thrive to hacking towers at Thomas Hill Reservoir and Mark Twain, Pony Express, Truman, and Montrose lakes.

Missouri becomes the 11th state to join the Interstate Wildlife Violators Compact. The compact allows Missouri to reciprocally honor hunting, fishing, and trapping license revocations with other member states.

The Commission commends Director Jerry Conley on his receipt of two prestigious awards: the 1999 Seth Gordon Award from the International Association of Fish and



**Milestones and Notable Events: The Governor's Council on Disability presents the Department with its 1999 Inclusion Award for Community Enhancement to recognize the Department for its commitment to making conservation areas accessible for everyone.**

Wildlife Agencies, and the Conservation Medal from the National Society, Daughters of the American Revolution. Retired Department writer Joel Vance receives the J. Hammond Brown Memorial Award from the Outdoor Writers Association of America (OWAA), the nation's largest and most prestigious professional organization for communicators in the field of outdoor recreation and conservation. He is one of only three OWAA members to receive all three of their prestigious awards.

Posts a record spring turkey season in terms of both harvest and safety. The three-week season produces a harvest of 56,841 turkeys, an increase of 6,503 birds over the previous record set in 1999. The season also sets a record for the lowest number of hunting incidents in any modern spring turkey season. There are no fatal and only four non-fatal hunting incidents.

## CONSERVATION COMMISSION

**Ronald J. Stites, chairman\***

**Randy Herzog, vice chairman\*\***

**Anita B. Gorman, secretary**

**Howard Wood, member**

*\* Ronald J. Stites served as chairman July to December 2000 and then served as vice chairman January to June 2001.*

*\*\* Randy Herzog served as vice chairman July to December 2000 and then served as chairman January to June 2001.*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2001 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$88,085,276
Permit Sales .....	\$28,533,848
Federal Reimbursements .....	\$12,456,843
Sales and Rentals .....	\$7,552,499
Interest .....	\$1,863,801
Other Sources .....	\$3,436,649
<b>Total Receipts .....</b>	<b>\$141,928,916</b>

#### DISBURSEMENTS

Fisheries .....	\$14,337,752
Forestry .....	\$15,166,928
Wildlife .....	\$13,739,792
Protection .....	\$15,239,784
Natural History .....	\$2,306,434
Outreach and Education .....	\$12,889,634
Private Land Services .....	\$4,603,906
Administration .....	\$5,834,998
Administrative Services and Human Resources .....	\$30,203,931
Design and Development .....	\$9,399,512
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$3,864,469
Construction and Development .....	\$20,402,924
<b>Total Disbursements .....</b>	<b>\$147,990,064</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

Fishing:

New White River Border Lakes Permit (\$10), in conjunction with a valid fishing permit, allows a Missouri resident to fish anywhere on the Arkansas portions of Bull Shoals, Norfolk, and Table Rock lakes—a \$22 savings over what they formerly paid for a nonresident Arkansas fishing license.

Eliminates area winter fishing tag. The purchase of a Trout Permit (\$7) in addition to the prescribed fishing permit now allows anglers to fish at Roaring River, Bennett Spring, Montauk, and Maramec Spring trout parks during the winter catch-and-release season.

New reciprocal fishing agreements with Illinois and Arkansas greatly expand fishing opportunities for Missouri anglers on waters shared with those two states. New regulations make it easier for anglers to know and follow regulations on the Mississippi River.

**Notable Wildlife Code Changes:** Adds Hine's emerald dragonfly to the list of invertebrates endangered in Missouri. A population of Hine's emerald dragonflies is discovered on Grasshopper Hollow Natural Area in Reynolds County in June 1999. This is the only occurrence known in Missouri (subsequently they have been located in additional areas). This species was listed as federally endangered by the U.S. Fish and Wildlife Service in January 1995.





Prohibits snagging, snaring, and grabbing throughout the year on a portion of the Osage River below Bagnell Dam to protect small paddlefish and catfish.

Sets minimum length limit on rock bass (goggle-eye) to 8 inches on portions of the Eleven Point River and Osage Fork of the Gasconade River.

Increases minimum length limit on black bass to 18 inches on Montrose Lake. Daily limit reduced to two bass.

Establishes 14 miles of wild-trout management area on Little Piney Creek.

#### Hunting and Trapping:

Beginning with the spring 2001 turkey season, qualifying nonresident landowners can purchase deer and turkey hunting permits at reduced prices. To qualify, nonresidents must own a minimum of 75 contiguous acres within a single management unit.

Introduces the first youth-only spring turkey season, a special two-day season for resident youths ages 6–15. Youth hunters harvest 2,530 birds in the inaugural season.

#### General:

Establishes otter trapping zones to permit increased harvest.

Sets regulations for the legal harvest of wild ginseng.

Designates the demonstration pond on Lost Valley Hatchery and Honkers Pond on James A. Reed Memorial Wildlife Area as a youth-only fishery in an effort to stimulate interest in fishing for children 12 years of age or younger.

Agrees that rather than establishing a season for hunting feral hogs, an eradication program should be undertaken.

## PROGRAMS AND PARTNERSHIPS

Pays \$695,638 to counties in lieu of taxes and \$308,461 for land in the Forest Cropland program. Since 1980, more than \$8.2 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.

Restores McKenzie Creek using federal buyout funds to remove many flooded structures and cars, and installs stream improvement measures to create a greenway park that is now a community highlight. Partners include Natural Resources Conservation Service, the City of Piedmont, and Piedmont-area Stream Teams.

Develops Bring Back Bob quail habitat initiative, in cooperation with Quail Unlimited, to provide 75 percent cost-share or incentive payments to landowners who implement approved practices.

Operation Game Thief produces 197 court cases.

Through the Share the Harvest program, 1,338 hunters donate more than 49,000 pounds of venison.

Works with St. Louis City and County to rehabilitate Carp Lake in Suson Park and Boathouse Lake in Carondelet Park.



**Programs and Partnerships:** Initiates the Grow Native! program to increase interest and availability of native wildflowers, trees, and shrubs.





**Administration:** Purchases or receives in trade 3,324 acres. Receives land donations totaling 1,037 acres, including 736-acre Dan and Maureen Cover Prairie Conservation Area in Howell County (above) for upland bird management.

Private Land Services Division completes its first full year of service. The 82 employees provide on-site assistance to 6,330 individual landowners, impacting more than 300,000 acres of land. Private land conservationists, urban watershed conservationists, and other specialists provide a full range of natural resource conservation assistance. Forms effective partnerships with the Natural Resources Conservation Service, Soil and Water Districts, Quail Unlimited, Ducks Unlimited, National Wild Turkey Federation, Audubon-Missouri, Missouri Conservation Heritage Foundation, and others.

Joins in creating the Missouri Corporate Wetland Restoration Partnership, a private/public partnership in which environmentally conscious corporations take the lead in restoring Missouri's wetlands and make available at least \$1 million per year to fund wetland restoration projects.

Distributes more than 5.8 million seedlings to nearly 13,600 individual landowners—an increase from 2000 of 20 percent or more than 1 million seedlings.

Volunteers and Department staff certify 28,798 students in 969 Hunter Education courses.

Develops a five-year plan to remove black carp from the state. The primary objective is to keep black carp, an ecologically destructive species, from escaping from

commercial fish farms and reproducing in public waters. As part of the plan, the Department acquires or rears sexually sterile black carp that are then offered to fish farmers who rely on the species to control snails that serve as intermediate hosts for parasitic flatworms that can infest the fish they are trying to raise. The plan also calls for the elimination of illegally held, fertile black carp.

## ADMINISTRATION

John Hoskins is promoted from General Services Chief to Protection Division administrator on Jan. 26, 2001. He holds this position until May 31, 2002.

Expands markets for *Conservation On Call*, the Department's weekly radio program. It is now broadcast by eight different radio stations in seven different markets.

Contracts for construction of the Four Rivers Unit 3 and 4 wetlands development project in Vernon County; Warrenton office complex in Warren County; Andy Dalton Shooting Range and Training Center complex additions at the Bois D'Arc Conservation Area in Greene County; Pool 1 and 3 renovations at the Duck Creek Conservation Area in Bollinger, Stoddard, and Wayne counties; and Bellefontaine Conservation Area pond development project in St. Louis County.



Adds spotted knapweed to the problem species list in the Department's exotic plant species policy.

Proceeds with El Dorado Springs Shooting Range with a \$15,000 grant and design support.

Completes a statewide telephone survey for citizen opinions about elk reintroduction, in addition to a mail survey of landowners in the proposed 10-county restoration zone.

Accepts the Missouri Elk Reintroduction Feasibility Study and agrees not to introduce elk at this time, due in part to recent developments of chronic wasting disease and the potential impact it could have in Missouri.

Approves the Mountain Lion Response Guidelines for dealing with mountain lion sightings and incidents. In the last six years there have been five verified sightings of free-roaming mountain lions in Missouri.

Designates two Missouri Natural Areas: Danville Glade addition in Montgomery County and Morris Prairie in Sullivan County. The Natural Areas system now contains 177 areas totaling 56,000 acres protecting the best examples of Missouri's terrestrial and aquatic natural communities.

Removes deer translocation as a management option from the urban deer guidelines because it is proven unsuccessful in the City of Town and Country and agrees that lethal removal is still the most acceptable and effective method to deal with urban deer populations.

Agents make 191,715 resource contacts, note 27,940 wildlife violations, issue 3,453 written warnings, and makes 6,790 arrests.

Operation Game Thief produces 194 court cases completed from 664 telephone calls.

Produces 4,551,921 warm- and cold-water fish for stocking in various waters.

Manages 849 public impoundments totaling 277,055 acres of water.

The Department issues 1,439,201 resident and nonresident fishing permits and tags of all types to 721,037 people.

Graduates 21 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Accepts a conservation easement donation from Edith Carlson of more than 1,375 acres in Lincoln County.

## MILESTONES AND NOTABLE EVENTS

This is the last year (as of 2012) that statewide antlered buck harvest exceeds doe harvest. The management goal of increasing doe harvests was achieved with the liberalization of antlerless harvest and later implementation of the four-point antler restriction to stabilize deer herd populations.

Department examples and case studies are included in the first textbook on human dimensions of natural resource management, entitled *Human Dimensions of*

*Wildlife Management in North America*, published by The Wildlife Society.

Presents two Canvasback Awards, sponsored by the Upper Mississippi River/Great Lakes Joint Venture—North American Waterfowl Management Plan to Adolphus A. Busch, IV, and James T. Blair, IV, for their leadership and energy as Ducks Unlimited volunteers in organizing partnerships to purchase a 7,000-acre addition to Four Rivers Conservation Area. It is significant that fathers of both of the recipients are former Conservation Commissioners.

In the fall of 2000, Department artist Mark Raithel completes three murals, each representing a decade of conservation progress, including the 1970s, 1980s, and 1990s. These works, on display at the Department's headquarters in Jefferson City, continue the tradition begun with the Charles W. Schwartz murals that depict Missouri's earlier conservation successes.

**Milestones and Notable Events:** Sets a record spring turkey harvest—including birds taken during the inaugural youth-only season—with hunters harvesting 57,832 turkeys, an increase of 991 over the 2000 season. It is the third consecutive spring turkey harvest record.



## CONSERVATION COMMISSION

Anita B. Gorman, *chairman*  
Howard L. Wood, *vice chairman*  
Stephen C. Bradford, *secretary*  
Cynthia Metcalfe, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2002 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$90,545,178
Permit Sales .....	\$28,916,832
Federal Reimbursements .....	\$14,563,425
Sales and Rentals .....	\$8,583,005
Interest .....	\$913,468
Other Sources .....	\$3,277,705
<b>Total Receipts .....</b>	<b>\$146,799,613</b>

#### DISBURSEMENTS

Fisheries .....	\$13,939,371
Forestry .....	\$14,779,428
Wildlife .....	\$13,322,731
Protection .....	\$14,781,070
Natural History .....	\$2,084,402
Outreach and Education .....	\$13,050,891
Private Land Services .....	\$5,371,201
Administration .....	\$6,664,129
Administrative Services and Human Resources .....	\$28,499,622
Design and Development .....	\$8,903,709
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$4,838,697
Construction and Development .....	\$13,329,929
<b>Total Disbursements .....</b>	<b>\$139,565,180</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Expands reciprocal sportfishing privileges with the State of Tennessee to allow anglers to fish in the Missouri portion of the Mississippi River and its backwaters adjacent to Tennessee.

Eliminates size restrictions and liberalizes daily limit for spotted bass on the Meramec, Big, and Bourbeuse rivers, and their tributaries to encourage harvest.

Extends prohibition of fish traps in, and adjacent to, all Missouri waters to also include their banks.

Passes special exemptions from fishing permit requirements for developmentally disabled residents.

### Hunting and Trapping:

Increases nonresident hunting permit fees.

Offers four youth-only managed deer hunts for the first time.

Introduces the first youth-only portion of the firearms deer hunting season Oct. 27–28, 2001. During the inaugural 2001 fall season, nearly 40,000 youth hunters take 6,451 deer.

Adds Eurasian collared doves to the list of game birds and establishes hunting seasons and limits.

### General:

Introduces a new look for hunting, fishing, and trapping permits. The new permits use black ink on bright yellow paper. Adhesive paper replaces the old cash register receipt format. The new format is larger, more durable, and easier to read.

Restructures fees for lifetime hunting and fishing permits from a flat fee to a graduated fee system based on age, with children and older adults receiving lower priced permits.

Adds the scaleshell mussel and Tumbling Creek cavesnail to the list of native species endangered in Missouri.

## PROGRAMS AND PARTNERSHIPS

Pays \$576,070 to counties in lieu of taxes and \$312,800 for land in the Forest Cropland program. Since 1980, more than \$8.7 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.

Through the Share the Harvest program, 1,623 hunters donate 76,000 pounds of venison. Fifty-one processors participate.

Governor Bob Holden launches the No MOre Trash! campaign, Missouri's first statewide anti-litter campaign, coordinated by the Department of Conservation and the Department of Transportation.

The Department helps sponsor the first Missouri River Relief river cleanup at Easley, on Oct. 6, 2001.





**Programs and Partnerships: Produces and sells more than 7 million seedlings this year to 13,725 landowners.**

There are now 2,000 Stream Teams operating in Missouri. The State of Missouri, represented by the Department, serves as chair for the Interstate Wildlife Violators Compact as one of 19 member states.

Opens Theodosia arm of Bull Shoals Lake to encourage waterfowl hunting on a walk-in basis to assist with management of Canada goose populations.

Through the Managed Deer Hunt program, 5,849 hunters harvest 2,256 deer at 33 locations.

In cooperation with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service, assists with the construction of cave gates to protect endangered bats at Rocheport and Great Spirit caves, the two largest cave gating projects in the world.

Opens Rudolf Bennitt Lake to fishing. Facilities include a disabled accessible boat ramp, fishing dock, privy, and parking lot.

Improves access at Roaring River State Park in cooperation with the Missouri Department of Natural Resources. Improvements include a new bridge, a disabled-user-accessible walkway adjacent to the stream, and streambank reinforcement.

Initiates the First Fish Certificate program to recognize anglers and their first catch.

Approves the Brandon Key Program Area of Manitoba as the next effort in the Department's continuing partnership with Ducks Unlimited to support bird habitat conservation in Canada.

More than 2,050 volunteer instructors, and Department staff, conduct 1,051 Hunter Education courses and certify more than 34,000 students.

Receives two grants: \$100,000 from the National Fish and Wildlife Foundation for greater prairie chicken management in southwest Missouri; and \$203,000 from

the Transportation Enhancement Funds for East-West Gateway Coordinating Council for I-44, Shaw Corridor. Progress at Columbia Bottom Conservation Area includes the setback of 8,000 feet of the Mississippi River levee and construction of wetland management facilities to create 800 acres of managed wetland and an additional 100 acres of opportunistic wetlands. This work will be completed through the U.S. Army Corps of Engineers' Missouri River Mitigation Program and will be 100-percent federally funded (\$7 million).

Notes growing concern about the spread of chronic wasting disease (CWD) in cervids. CWD is still not known to exist in Missouri, but the movement of possibly infected animals into the state has increased the risk. The Department approves the payment for CWD testing in captive cervids associated with the pending CWD surveillance program in concert with the Missouri Department of Agriculture, should funding become unavailable through federal programs. This funding would be made available during the first two years of surveillance implementation.

Expresses appreciation to National Wild Turkey Federation for their donation of \$12,000, which the Department matched, for use in pursuing unlawful turkey hunters. More than 70 arrests have been made for the illegal taking of turkeys.

Authorizes grants of \$2 million over the next four years to the Joplin Nature Center Partnership; and \$1 million to the St. Joseph Nature Center Partnership.

Continues funding for the Great Rivers Resource Center as a \$1 million grant.

Approves funding to Shaw Nature Reserve, in connection with Grow Native! and other educational programs.

Approves \$25,000 grants to the Mill Creek Park eco-pond and nature overlook project in Kansas City and to Squaw Creek National Wildlife Refuge for expansion of an auditorium.

Hosts the International Hunter Education Instructors Association Conference in Springfield.

## ADMINISTRATION

Denise Brown is hired as assistant to director-public affairs on Aug. 1, 2001. She holds this position until Mar. 14, 2008.

Department staff and partners restore habitat and improve the status of prairie chickens, scaleshell mussels, Topeka shiners, and Niangua darters.

Provides greater management assistance and financial incentives to private landowners who voluntarily participated in the recovery of some of Missouri's rare species.

Discovers new populations of Hine's emerald dragonflies, Hall's bulrush, Indiana bats, and Illinois chorus frogs, and

augments populations of declining black sandshell and snuffbox mussels.

Agents make 216,311 resource contacts, note 24,417 wildlife violations, issue 3,897 written warnings, and make 7,214 arrests.

Designates four Missouri Natural Areas: Overcup Fen Natural Area in Ripley County; Pipestem Hollow Natural Area in Shannon County; an addition to the Ashe Juniper Natural Area; and an area in Meramec State Park. This expands the Natural Areas system by 1,184 acres. It now contains 180 areas with 57,214 acres protecting the best examples of Missouri's terrestrial and aquatic natural communities.

Produces and releases nearly 200,000 juvenile mussels of the scaleshell and pink mucket (both federally endangered), the Neosho mucket (federal candidate), snuffbox (state endangered), and black sandshell (state species of conservation concern). Recapturing juvenile Neosho muckets stocked in 2000 provides evidence that propagated juvenile mussels are surviving and growing in the wild.

Contracts for the construction of the Roaring River State Park hatchery bridge repair and bank fishing development project in Barry County; audio-visual system for the Discovery Center and Metro Office Urban Conservation Campus in

Kansas City; Southeast Regional Office renovation project in Cape Girardeau; and Columbia Bottom Conservation Area maintenance building in St. Louis County.

Names the area west of the Nodaway River at Nodaway Valley Conservation Area the Ronald J. Stites Wetland Unit, the area east of Nodaway River the Randy Herzog Wetland Unit, and renames 240-acre Tingle Lake Conservation Area in Howell County to Tingle Prairie Conservation Area.

Due to results of the five-year City of Town and Country experimental deer research effort and emerging national and state concerns about threats of disease introductions due to the translocation of members of the deer family, the Commission unanimously authorizes that no permit be given for continued relocation of live-trapped wild deer in Town and Country, rescinding the Commission's previous action of May 30, 2001.

Uses a new system called Resource Activity, Planning, Tracking, Organizing, and Reporting (known as RAPTOR) to develop the budget. It allows budgeting by project and allows staff to see accomplishments.

Manages 849 public impoundments totaling 277,055 acres of water.

Produces 7,294,188 fish for stocking in various waters.

**Administration:** Notes Lake Taneycomo is again one of the nation's finest tailwater trout fisheries, citing more and larger rainbow trout than at any time in the 24 years that the fishery has been monitored. Almost 60 percent of the population in the upper portions of the lake exceed 13 inches, and 12 percent are 16 inches or longer.







### ***Milestones and Notable Events:* Dedicates the Discovery Center in April 2002.**

Publishes the book *Native Landscaping for Wildlife and People*.

The 181-page book features ideas about how to use native plants for aesthetics and wildlife. Written by Dave Tylka.

Purchases or receives in trade 3,068 acres, including a 942-acre addition to B.K. Leach Conservation Area in Lincoln County. Receives land donations totaling 246 acres.

## **MILESTONES AND NOTABLE EVENTS**

Celebrates the 25th anniversary of Design for Conservation.

In 1976, Missouri voters approved a landmark, one-eighth of 1 percent sales tax dedicated solely for conservation of Missouri's forest, fish, and wildlife resources. The Department outlined its goals for the tax in a broad plan called Design for Conservation. Funds generated by the sales tax have been used for land acquisition, improving public access to streams, developing public fishing opportunities, building fish hatcheries, developing nature centers and other educational resources, and research.

Honors former Department Director Carl R. Noren, who passed away March 3, 2002. Noren was instrumental in the passage of the one-eighth of 1 percent sales tax

for conservation and for the development of Design for Conservation. His dedicated service to conservation will leave a lasting mark for future generations.

The Department's fifth staffed range facility, the Parma Woods Shooting Range and Outdoor Education Center, located in Platte County, opens on Nov. 7, 2001.

The largest fish kill in Missouri history occurs in the spring of 2002 in Lake of the Ozarks. An estimated 44,000 fish worth \$3.2 million are killed as the result of operations at AmerenUE's Bagnell Dam. Paddlefish are the most impacted species.

Presents award from the Upper Mississippi River/Great Lakes Joint Venture to the American Land Conservancy for its role in achieving a long-dormant land acquisition project that more than triples the size of B.K. Leach Memorial Conservation Area in Lincoln County. The establishment of a major wetland conservation area near St. Louis had been a goal of the Department since the beginning of the one-eighth of 1 percent sales tax in 1976.

*Missouri Outdoors* TV show producers and staff receive four regional Emmy Awards.

The Department dispatches 104 firefighters to fire suppression efforts in 13 states.



## CONSERVATION COMMISSION

Howard L. Wood, *chairman*  
 Stephen C. Bradford, *vice chairman*  
 Cynthia Metcalfe, *secretary*  
 Anita B. Gorman, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2003 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$89,855,329
Permit Sales .....	\$29,935,814
Federal Reimbursements .....	\$13,810,531
Sales and Rentals .....	\$6,688,103
Interest .....	\$744,851
Other Sources .....	\$3,149,179
<b>Total Receipts .....</b>	<b>\$144,183,807</b>

#### DISBURSEMENTS

Fisheries .....	\$14,293,493
Forestry .....	\$14,903,199
Wildlife .....	\$15,930,146
Protection .....	\$15,191,299
Natural History .....	\$2,438,957
Outreach and Education .....	\$13,169,371
Private Land Services .....	\$6,172,255
Administration .....	\$3,337,572
Administrative Services and Human Resources .....	\$30,079,223
Design and Development .....	\$8,870,367
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$2,016,669
Construction and Development .....	\$14,771,828
<b>Total Disbursements .....</b>	<b>\$141,174,379</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** Adds eastern and Ozark hellbenders to the state endangered species list.

### NOTABLE WILDLIFE CODE CHANGES

#### Fishing:

Expands reciprocal fishing privileges with State of Kansas to allow anglers to fish in either state's portion of the Missouri River and its backwaters.

Adds restrictions to help control illegal activities related to the harvest and sale of paddlefish eggs.

Walleye and sauger that are at least 18 inches in total length may now be taken from Wappapello Lake, the St. Francis River, and their tributaries.

The St. Louis area's urban winter trout fishing program now includes 16 lakes.

Restricts fishing on the Osage River within 225 feet below Bagnell Dam.



Establishes statewide no daily limit on goldfish and bighead, common, grass, and silver carp—all exotic species.

#### Hunting and Trapping:

Approves fee increases starting with the 2003 permit year.  
Expands deer hunting opportunities for firearms hunters by eliminating the quota system and making all Any-Deer permits valid statewide, increasing the number of units where Second Bonus permits are valid, and increasing the number of units open during the Antlerless-Only portion.  
Conducts second youth-only portion of the firearms deer hunting season. During the two-day portion of the 2002 season, nearly 40,000 youth hunters harvest 7,727 deer.  
Allows resident landowners born before Jan. 1, 1967, to accompany youth deer and turkey hunters on the landowners' property without completion of Hunter Education certification.

#### General:

Limits total camping days on all Department lands to 30 days within one calendar year.  
Approves reissuing no-cost, equivalent permit privileges to military personnel who bought hunting, fishing, or trapping permits on or after Jan. 1, 2002, but are unable to fully exercise the privileges purchased due to mobilization or deployment outside Missouri.

## PROGRAMS AND PARTNERSHIPS

Pays \$668,907 to counties in lieu of taxes and \$291,824 for land enrolled in the Forest Cropland program. Since 1980, more than \$9.4 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.  
Establishes the Agriculture Systems Field Station in Kirksville, the Big Rivers and Wetlands Field Station in Jackson, the Forest Systems Field Station in West Plains, and the Grasslands Systems Field Station in Clinton.  
Adopts a 10-year Strategic Bobwhite Quail Plan to emphasize public and private land bobwhite quail restoration efforts.  
Operation Game Thief logs 539 calls, resulting in 142 convictions. Pays informants \$11,300 in rewards leading to arrests of *Wildlife Code* violators.  
Through the Share the Harvest program, 1,826 hunters donate more than 96,595 pounds of venison.  
Through the Managed Deer Hunt program, 5,671 hunters harvest 2,099 deer during 71 hunts at 36 locations.  
Distributes 5.5 million seedlings for planting to 13,185 landowners.  
Distributes more than \$200,000 to 138 fire departments for the purchase of safety and firefighting equipment.

More than 2,200 volunteer instructors, and Department staff, conduct 1,062 Hunter Education courses and certify 32,328 students.

The Department and other partners begin developing a bat conservation plan for Missouri.

Completes lake renovations at Forest Park and Carondelet Park. Creates four youth-only fishing ponds and a successional wetland.

Develops several accesses in the Kansas City area through the Community Assistance Program: LaBenite Park, Riverfront Park, and Fort Osage.

Enters into a nature center lease/purchase agreement with the Cape Girardeau County Commission.

Contracts for construction of the Cape Girardeau Conservation Campus; Columbia Bottom Conservation Area Visitor Center, St. Louis County; Little River Conservation Area improvements in Dunklin County; and boat ramp and improvements at Pelican Island Access in St. Louis County; and renovation of the Jerry J. Presley Conservation Education Center near Eminence.

The University of Missouri conducts the *Conservation Opinion Survey* for the Department.

## ADMINISTRATION

Director Jerry Conley retires on July 1, 2002.

John Hoskins is promoted from Protection Division administrator to director on July 1, 2002. He is only the seventh director since the Department was organized in 1937. He holds this position until Mar. 31, 2010.

Approves eight regional and new unit boundaries as part of Department reorganization. Combines the forest, fish, and wildlife research sections and many natural history programs into the new Resource Science Division. Also adds a Wildlife Diversity Section to the Wildlife Division. Policy Coordination Unit is reorganized into the Director's Office.

Robert Ziehmer is promoted from policy coordinator to governmental liaison on Sept. 16, 2002. His position is reclassified in August 2003 to assistant to director-governmental relations. He holds this position until Nov. 5, 2009.

Stephen Wilson is promoted from protection regional supervisor to deputy director on Oct. 1, 2002. He holds this position until April 30, 2006.

Carter Campbell is promoted from fiscal services chief to Administrative Services Division administrator on Nov. 20, 2002.

Lorna Domke is promoted from outreach programs chief to Outreach and Education Division administrator on Nov. 20, 2002. She holds this position until June 30, 2010.



**Administration:** Quadruples the number of specially managed fields to provide additional opportunities for dove hunters on conservation areas.

David Erickson is transferred from Administrative Services Division administrator to Wildlife Division administrator on Oct. 7, 2002. He holds this position until Sept. 30, 2007.

Dale Humburg is promoted from wildlife research biologist to Science Division administrator on Nov. 20, 2002. He holds this position until Sept. 30, 2007.

Dennis Steward is promoted from protection field chief to Protection Division administrator on July 1, 2002. He holds this position until June 30, 2008.

Transfers public outreach responsibility for the Grow Native! program from Private Land Services Division to Outreach and Education Division.

Tests approximately 6,000 deer, taken from one-third of Missouri's counties during the 2002 firearms deer season, for chronic wasting disease (CWD). All tests are negative, meaning CWD was not detected. Testing will continue through the 2005 firearms deer season.

Staff makes more than 5,000 on-site landowner visits to provide technical assistance in 2002. In addition, numerous habitat management workshops and field days are conducted across the state to help private landowners achieve their land use objectives while enhancing the conservation of Missouri's natural resources.

Conservation agents make 204,395 resource contacts, note 25,378 wildlife violations, issue 3,800 written warnings, and make 7,581 arrests.

Expands the Natural Areas system by more than 2,300 acres. It now contains more than 180 areas with 59,600 acres protecting the best examples of Missouri's terrestrial and aquatic natural communities.

In 2002, the Department issues 1,386,519 resident and nonresident fishing permits, and tags of all types to 846,155 people.

Produces 7,294,188 warm- and cold-water fish for stocking in various waters.

**Administration:** Lost Valley Hatchery raises more than 17,000 endangered Topeka shiners to be used for re-introduction into the state.





Manages 849 public impoundments totaling 277,055 acres of water.

Approves a policy for public use of Department areas, stating that the Department manages public lands to conserve forests, fish, and wildlife and to promote wise public use and understanding of natural resources. These include hunting, fishing, nature observation, and conservation education. Other public uses may be appropriate and are to be evaluated locally. Commercial use of conservation areas is discouraged except when it is essential to public use.

Supports maintaining current chronic wasting disease monitoring requirements associated with the intrastate movement of white-tailed deer. This action applies only to animals held in Missouri and will not affect existing testing requirements, tagging/marketing, record keeping, or interstate movement requirements. This decision continues to provide protection for Missouri's free-ranging herd while allowing captive cervid facilities permitted by the Department to continue under familiar regulations.

Publishes the book *Trees of Missouri*. The 400-page book describes 204 species and includes each tree's habitat, range, and physical characteristics. Written by Don Kurz, former Natural History Division chief.

Purchases or receives in trade 965 acres. Receives land donations totaling 815 acres, including the 340-acre John and Melba Anderson Memorial Conservation Area in Crawford County.

## MILESTONES AND NOTABLE EVENTS

The State of Missouri now has 15 million acres of forestland, according to research from a statewide forest inventory.

In *State ex rel. Missouri Department of Conservation v. Judges of the Circuit Court of Reynolds County, Missouri*, the Missouri Supreme Court holds that the proper venue for reviewing the suspension of hunting, fishing, and trapping privileges of 16 individuals by the Conservation Commission following a non-contested hearing was in Cole County. The court states that Article IV, section 40(a) of the Missouri Constitution grants the Conservation Commission the control, management, management, restoration, conservation, and regulation of the bird, fish, game, forestry, and all wildlife resources of the state and that the Commission's rulemaking authority is confirmed and amplified by Article IV, sections 45 and 46.

Columbia Bottom Conservation Area opens to the public with a dedication on May 30, 2003.

Design and Development Division receives the Award of Excellence from the Association of Conservation Engineers for the Lost Valley Hatchery project.

The Commission receives the 2002 Sport Fish Restoration Project Award from the American Fisheries Society for the Lost Valley Hatchery, Visitor Center, and Kids' Fishing Pond.

**Administration:** Approves the name Howard and Joyce Wood Education and Visitor Center for the new visitor center at Columbia Bottom Conservation Area in St. Louis County.



## CONSERVATION COMMISSION

Stephen C. Bradford, *chairman*  
 Cynthia Metcalfe, *vice chairman*  
 Anita B. Gorman, *secretary*  
 Lowell Mohler, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2004 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$93,488,139
Permit Sales .....	\$30,592,207
Federal Reimbursements .....	\$15,401,295
Sales and Rentals .....	\$7,579,995
Interest .....	\$589,553
Other Sources .....	\$3,542,080
<b>Total Receipts .....</b>	<b>\$151,193,269</b>

#### DISBURSEMENTS

Fisheries .....	\$10,801,407
Forestry .....	\$14,235,963
Wildlife .....	\$14,479,161
Protection .....	\$13,294,140
Outreach and Education .....	\$15,223,426
Private Land Services .....	\$6,027,527
Resource Science .....	\$10,662,262
Administration .....	\$2,991,907
Administrative Services and Human Resources .....	\$28,830,801
Design and Development .....	\$10,795,902
General Region Expenditures .....	\$3,943,120
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$4,656,174
Construction and Development .....	\$12,939,215
<b>Total Disbursements .....</b>	<b>\$148,881,005</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Expands reciprocal fishing privileges with Kentucky, to allow anglers to fish in the Mississippi River within the boundary of Missouri adjacent to the State of Kentucky. Expands black bass special management area on the Big River.

### Hunting and Trapping:

Approves a shift in deer harvest management to increase antlerless deer harvest in units where deer are abundant.

**Notable Wildlife Code Changes:** Opens portions of the James River to snagging, snaring, grabbing, harvest, and possession of paddlefish.







**Programs and Partnerships:** Reports on the Department's participation in the Lewis and Clark Bicentennial (2004–2006). Assuming that all counties bordering the river were visited by the river expedition or the accompanying shore party, 234 conservation areas are incorporated into planning activities. Some of the Department's ongoing projects include creating trunks of Lewis and Clark teaching materials for schools, exhibits at nature centers and offices, reenactments, special programs, books, videos, and Web pages. Cooperative projects include development and placement of Lewis and Clark signs across the entire state, a floating classroom and museum, riverfront projects in both St. Louis and Kansas City, and a Great Rivers Resource Center in St. Louis.

Establishes an urban portion of the firearms season, increases the number of counties open during the antlerless portion of the season, increases the number of counties where Antlerless Deer permits are available, allows hunters to purchase and fill any number of Antlerless permits, and expands the number of resident landowners who qualify for no-cost permits. Most counties have unlimited availability of archery antlerless-only permits.

Eliminates the restriction allowing the harvest of only one bird during the first week of the fall firearms turkey season. To address growing feral hog population, allows feral hogs to be taken in any number by any method without permit throughout most of the year.

Expands squirrel season from May through Feb. 15 (it previously ended on Jan. 15).

Authorizes a trial telephone checking system during the 2004 spring turkey hunting season, involving approximately 6,000 permit recipients.

Changes the opening date of youth spring turkey hunting season in some years. The youth season still will open nine days before the opening day of the regular spring turkey season most years. However, when this would cause the youth season to overlap with Easter, the youth season will open the Saturday prior to Easter weekend.

## PROGRAMS AND PARTNERSHIPS

Pays \$667,032 to counties in lieu of taxes and \$286,452 for land enrolled in the Forest Cropland program. Since 1980, more than \$10 million has been returned to Missouri counties under the Payment in Lieu of Taxes program.

Establishes the Missouri River Field Station in Chillicothe. Private Land Services Division staff represent the nation's state fish and wildlife agencies at national level negotiations on development of recommendations for the 2008 U.S. Department of Agriculture Farm Bill conservation programs.

Through the Managed Deer Hunt program, 5,713 hunters harvest 2,186 deer during 71 hunts at 39 locations.

The Stream Team Volunteer Water Quality Monitoring Program trains 367 volunteers in 30 water quality monitoring workshops across Missouri. A total of 1,352 data sets on stream surveys, water chemistry, and invertebrates are submitted to the sponsoring agencies.

Distributes \$380,988 to 188 fire departments for the purchase of safety and firefighting equipment.

New lakes in Macon County, and in the cities of St. Charles, Jennings, and Marceline, come under Community Assistance Program cooperative management, as did river accesses in Lexington and in Pemiscot County.

More Missouri communities receive help for local tree resources, with \$280,000 in grants being allocated directly to 39 municipalities and public schools through the Tree Resource Inventory and Management grant program.

Stream Teams contribute more than 40,000 hours for litter pickups and more than 13,000 hours of water quality monitoring.

The Stash Your Trash program distributes nearly 270,000 trash bags to Stream Teams and float outfitters, preventing an estimated 1,300 tons of trash from entering Missouri streams.

Distributes 6.3 million seedlings for planting to nearly 13,000 landowners.

More than 2,200 volunteer instructors, and Department staff, conduct 1,072 Hunter Education courses and certify 20,046 students.

Protection volunteer program begins in southwest region.

Establishes the Missouri Bird Conservation Initiative with 28 member organizations. This state level, step-down organization forms as a partner of the North American Bird Conservation Initiative. Many millions of dollars have been spent on bird conservation in Missouri because of these multi-partner efforts.

## ADMINISTRATION

Lisa Allen is promoted from forest management chief to Private Land Services Division chief on October 10, 2003. She holds this position until March 2, 2006.

Steve Eder is promoted from fisheries field operations chief to Fisheries Division chief on Oct. 10, 2003. He holds this position until June 30, 2008.

Approves a new statewide trout management plan.

Completes a *Plan for Missouri Trout Fishing*. This included implementing a new, statewide, minimum length limit for brown trout and increasing the number and size of trout stocked. Changes to length limits, daily

limits, and other fishing restrictions are planned for a number of trout areas. Winter trout-fishing opportunities in the cities of Columbia, Jefferson City, and Jackson will be expanded.

Department biologists establish a program to assist federal authorities in monitoring sturgeon abundance, movement, and harvest to protect sturgeon populations in Missouri. Department hatcheries are producing pallid and lake sturgeon to help restore populations of these species in Missouri's big rivers.

A statewide *Catfish Management Plan* will diversify catfish fishing opportunities and gather more information to improve management of catfish. Recommendations include establishing separate, statewide daily creel limits for channel catfish and blue catfish and establishing a special flathead catfish management area on the Missouri River in central Missouri. Before it is finalized, the Department conducts six meetings around the state to gather public input on the draft plan.

Resource Science Division is involved in more than 150 research, survey, and monitoring activities that result in 320 technical presentations, 57 workshops, and 45 technical publications. These are enhanced by cooperative projects with eight universities and state and federal agencies and supplemented by nearly \$1 million in outside funding and more than \$6 million in partner support.

Staff make more than 4,700 on-site landowner visits to provide technical assistance for forest, fish, and wildlife management. A total of 303 workshops and meetings provide conservation information to about 65,000 individuals. In addition, assistance is provided to communities, urban planners, and developers in metro areas to help integrate conservation with urban growth.

Department staff provides national leadership in research on trap standards and cable restraints, mourning dove harvest management, coordinated bird monitoring, waterfowl harvest strategy, communicating invasive species challenges, and an assessment of public use on the Missouri River.

Extends and modifies the five-year plan to eliminate black carp from Missouri through June 2009.

Grants St. Joseph a one-year extension of the performance deadline for a nature center challenge grant.

Approves the redirection of \$940,000 in challenge grant funds from the Great Rivers Resource Center project in St. Louis to the Audubon Ark project being developed by Audubon Missouri.

Institutes a catfish research project on parts of the Mississippi, Fabius, Lamine, Grand, Platte, Gasconade, and Marmaton rivers to gauge impacts of existing sportfishing.





**Administration:** Designates Pawnee Prairie Conservation Area in Harrison County as a Missouri Natural Area.

In 2003, the Department issues 1,382,219 resident and nonresident fishing permits and tags of all types to 851,518 people.  
Produces 5,493,761 warm- and cold-water fish for stocking in various waters.  
Manages 870 public impoundments totaling 277,425 acres of water.  
Graduates 18 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.  
Purchases or receives in trade 788 acres, including 334-acre LaBelle Lake Conservation Area in Lewis County.  
Receives land donations totaling 185 acres.

## MILESTONES AND NOTABLE EVENTS

Renames the Kansas City Discovery Center the Anita B. Gorman Conservation Discovery Center.  
Dedicates the Visitor Center at the Columbia Bottom Conservation Area on May 27, 2004.  
Celebrates the 50th anniversary of the Current River Natural Area in Shannon County with Leo Drey, the L-A-D Foundation, and the Society of American Foresters. The L-A-D Foundation adds 255 acres to the natural area as part of the commemoration.  
Reports a record spring turkey harvest total, to date, of 60,744 birds.



## CONSERVATION COMMISSION

Cynthia Metcalfe, *chairman*  
 Anita B. Gorman, *vice chairman*  
 Lowell Mohler, *secretary*  
 Stephen C. Bradford, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2005 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$96,524,659
Permit Sales .....	\$30,682,444
Federal Reimbursements .....	\$19,198,694
Sales and Rentals .....	\$7,257,446
Interest .....	\$768,589
Other Sources .....	\$2,687,792
<b>Total Receipts .....</b>	<b>\$157,119,624</b>

#### DISBURSEMENTS

Fisheries .....	\$11,278,188
Forestry .....	\$14,987,545
Wildlife .....	\$15,106,140
Protection .....	\$13,470,876
Outreach and Education .....	\$16,092,745
Private Land Services .....	\$6,766,496
Resource Science .....	\$11,669,901
Administration .....	\$2,350,815
Administrative Services and Human Resources .....	\$27,243,693
Design and Development .....	\$11,082,357
General Region Expenditures .....	\$4,207,428
Land Acquisition, Landowner Assistance, In Lieu of Taxes .....	\$5,057,758
Construction and Development .....	\$16,242,558
<b>Total Disbursements .....</b>	<b>\$155,556,500</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Approves an experimental hand-fishing season for channel, blue, and flathead catfish on portions of the Fabius, St. Francis, and Mississippi rivers as part of a five-year study to determine the effects of hand fishing on catfish populations and whether such a season should be established in the long term. Hand-fishers will be required to purchase a \$7 Hand-Fishing Permit.

Sets a statewide daily limit for trout at four, unless otherwise restricted.

Sets minimum length limits for brown and rainbow trout on a number of creeks and rivers.

### Hunting and Trapping:

Simplifies statewide deer regulations and improves the Department's ability to manage deer numbers. Changes include county-level management, unlimited antlerless permits in most counties, four-point antler restriction, and an urban counties portion of the firearms season. Antler-point restrictions in 29 pilot counties and a focus on harvest of antlerless deer are designed to increase doe harvest and average age of bucks. In the pilot area, bucks can be taken only if they have antlers with at least four points one inch or longer on one side. Pilot efforts in checking deer by telephone show promise for more convenient and efficient tallies of harvest totals.

Moves up the opening of archery deer and turkey season from Oct. 1 to Sept. 15 for the first time.

New Resident Cable Restraint Permit (\$25) allows furbearer trapping through the use of cable restraint devices from Dec. 15, 2004–Feb. 15, 2005.

Extends furbearer season for badger, bobcat, coyote, gray fox, red fox, mink, opossum, raccoon, and striped skunk from Nov. 15, 2004–Feb. 15, 2005. Beavers may be trapped from Nov. 15, 2004–March 31, 2005.

Allows hunting for male pheasants from Nov. 1–Jan. 15 north of Interstate 70 and also in a portion of St. Charles County south of Interstate 70.

Requires hunters to check deer or turkeys before leaving the state.

Designates the nutria as a furbearing animal with an open trapping season.

Makes unlimited antlerless deer permits available for many Missouri counties (249,518 permits sold) and many more no-cost Any-Deer and Antlerless Deer permits are made available to resident landowners (325,353 permits).

Expands urban deer harvest opportunities to maintain deer populations at homeowner-desired herd levels, while satisfying the desires of the growing number of urban hunters.



Reduces the bag limit for Canada geese from two to one during the late season in the North and Middle zones in the fall 2004 season, due to a production bust for the Eastern Prairie population of Canada geese.

General:

Increases chronic wasting disease testing standards for Class I breeders and big-game hunting preserves with a status of less than three years.

Amends the *Wildlife Code* to include *Investigation and Monetary Values of Fish and Freshwater Mussel Kills*, a publication by the American Fisheries Society. For the first time, the Department is able to seek monetary reimbursements for mussels killed during a pollution spill.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,339,405 to counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments.

Establishes new regulations, in cooperation with Illinois, Kentucky, and Tennessee, on the commercial harvest of shovelnose sturgeon in the Mississippi River to protect the sturgeon population from overharvest due to the worldwide demand for caviar.

Through the Share the Harvest program, 5,161 hunters donate 275,374 pounds of venison.

Initiates the Learning Outdoors school program to help Missouri schools teach children what it takes to keep our forests, fish, and wildlife thriving. Grants for field trips, outdoor classrooms, and learning kits will be integrated with teaching units to meet the demands of student testing. The Managed Deer Hunt program coordinates 91 managed hunts on 47 public areas.

Hatcheries produce about 8.4 million fish, stocking many farm ponds, reservoirs, and streams.

Provides 179 rural fire departments with more than \$380,000 in grants that fund equipment, special clothing, and training.

Distributes 5 million seedlings for planting to nearly 13,000 landowners.

Develops 180 Landowner Forest Stewardship Plans.

Data collection for the 13-month *Missouri River Public Use Assessment* study is completed to estimate public use on and along the Missouri River from Gavins Point Dam near Yankton, S. Dakota, to the river's mouth at St. Louis.

Assists with development of quail-friendly farming practices in partnership with the University of Missouri's Bradford Research and Extension Farm to demonstrate

**Programs and Partnerships:** More than 2,200 volunteer instructors, and Department staff, conduct 1,072 Hunter Education courses and certify 20,046 students.







**Administration:** Private Land Services staff make 6,087 on-site landowner visits to offer technical assistance in the development of habitat management plans.

how agriculture and wildlife can be mutually beneficial. More than 5,000 visitors a year see these demonstrations.

## ADMINISTRATION

More than 840,000 people buy fishing permits making fishing one of the most popular outdoor activities in Missouri. Completes *Statewide Coldwater Hatchery Study*. Recommendations include upgrading facilities and increasing trout production by 20 percent.

Contacts more than 200,000 Missourians to determine their outdoor activities and opinions about conservation programs.

Private Land Services Division delivers more than \$1.1 million in cost-share funds to approximately 850 private landowners; provided on-site technical assistance to more than 6,000 private landowners; improves habitat for quail and grassland songbirds on more than 10,700 acres of private land; helps landowners enroll almost 6,800 acres into the Wetland Reserve Program; and assists almost 5,300 private landowners in controlling nuisance wildlife.

Manages 897 lakes and 40 stream management areas for public fishing.

Debuts the Operation Game Thief trailer, a mobile exhibit designed to promote citizen use of the toll-free telephone hotline to report wildlife violations. Exhibit is used 120 days during the year.

The Bagnell Dam/AmerenUE settlement agreement asks the Federal Energy Regulatory Commission to adopt specific conditions to protect the fishery and wetland resources affected by the relicensing of Bagnell Dam/AmerenUE power generation utility. If accepted, the benefits to the natural resources, and the multi-billion dollar Lake of the Ozarks tourism industry, will extend for the 40-year life of the new license. At Lake of the Ozarks, fish kills will be minimized, critical habitats protected, and adequate water levels retained. Water quality and habitat improvements will be provided for the 82 miles of the Osage River below Bagnell Dam.

As part of the five-year catfish harvest management study, in 2005, more than 8,000 catfish are captured, tagged, and released—the largest such study ever conducted. Monitoring population and size-class changes will provide better information to manage these popular sportfish. The study will also look at spawning behavior and catfish movement.

Actively manages more than 53,000 acres of forestland.

Completes and submits the Comprehensive Wildlife Conservation Strategy to the U.S. Fish and Wildlife Service—a federal requirement to allow Missourians to obtain additional federal funds. The strategy describes the Department's plans, often focused on defined geographic areas known as Conservation Opportunity Areas, for conserving native plants and animals, and the habitats they depend upon.

The Department emphasizes restoration of quail and grassland bird habitats on Department lands, implements regional quail/grassland bird action plans, and identifies prospective private landowner cooperatives within quail focus areas. Implements quail and bird population monitoring to evaluate management actions.



The new Telecheck system allows hunters to check deer and turkey by phone or online. The Department estimates it will save \$500,000 a year with this system.

Designates Pawnee Prairie Conservation Area as a Missouri Natural Area; and 255 acres as an addition to the Current River Natural Area in Shannon County.

Contracts for construction of the Blind Pony Lake water distribution system upgrade in Saline County; Northeast Region Education and Service Center in Adair County; Sedalia office and shop building in Pettis County; and Southwest Regional Office renovation and addition in Greene County.

Creates a position to work specifically with the ever-growing issue of invasive species. The invasive species coordinator starts Sept. 2005, and is housed in the Wildlife Division.

Purchases or receives donations of 2,570 acres, including 200-acre Sand Prairie Conservation Area in Scott County.

## MILESTONES AND NOTABLE EVENTS

The International Association of Fish and Wildlife

Agencies recognizes Bill McGuire for significant contributions to fish and wildlife conservation through his leadership of the Agricultural Conservation Task Force and dedication to ensuring wildlife benefits from Farm Bill programs.

The *Kansas City Star* newspaper releases a two-part, front-page story, entitled, *For One State Agency, Cash Flow Never Stops*, critical of the Department and questioning the need for continuation of the Conservation Sales Tax. Citizens and partners rally to the Department's defense.

"Operation Homestead," a joint investigation with the State of Iowa, is completed, resulting in more than 200 citations and in excess of \$36,000 in fines to individuals who unlawfully bought resident permits in both states.

**Milestones and Notable Events:** Opens the Cape Girardeau Conservation Nature Center in May 2005. It focuses on southeast Missouri's unique habitats and history.



## CONSERVATION COMMISSION

Lowell Mohler, *chairman*  
 Stephen C. Bradford, *vice chairman*  
 Cynthia Metcalfe, *secretary*  
 William F. “Chip” McGeehan, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2006 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$99,069,219
Permit Sales .....	\$29,723,302
Federal Reimbursements .....	\$24,387,069
Sales and Rentals .....	\$6,692,101
Interest .....	\$1,265,130
Other Sources .....	\$3,570,635
<b>Total Receipts .....</b>	<b>\$164,707,456</b>

#### DISBURSEMENTS

Fisheries .....	\$11,649,737
Forestry .....	\$15,168,275
Wildlife .....	\$16,219,278
Protection .....	\$13,640,869
Outreach and Education .....	\$16,232,568
Private Land Services .....	\$7,908,722
Resource Science .....	\$12,095,061
Administration .....	\$2,361,266
Administrative Services and Human Resources .....	\$29,962,307
Design and Development .....	\$11,526,041
Regional Public Contact Offices .....	\$4,345,058
County Assistance Payments .....	\$1,396,316
Capital Improvements .....	\$31,881,331
<b>Total Disbursements .....</b>	<b>\$174,386,829</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Experimental catfish hand-fishing season continues this year, with amended regulations due to poor reporting.  
 Bans transporting or selling native species taken in Missouri as live bait in other states, to help other states keep unwanted, non-native species out of their waters.  
 Allows nonnative goldfish and bighead, common, grass, and silver carp of any length to be used as live bait.  
 Due to increased harvest pressures on shovelnose sturgeon, expands commercial harvest restrictions on the Missouri River to also include the Mississippi River.  
 Anglers now can fish throughout waters of the Des Moines River that form the boundary between Missouri and the State of Iowa.  
 Reduces daily limit to five blue catfish, to allow more of these long-lived species to reach large sizes as they once did in Missouri.  
 Sets crappie length limit at Wappapello Lake to 9 inches, to improve the crappie fishery without reducing the daily limit.  
 Establishes White Ribbon Trout Area on Hickory Creek in Newton County.  
 Expands winter trout fishing program in the City of Mexico.

### Hunting and Trapping:

Implements Telecheck program for all deer and turkey hunting statewide, effective Sept 15, 2005. Telecheck allows hunters to check game by telephone instead of bringing it to check stations. The Department tested the system by allowing landowners to Telecheck deer last year.  
 Expands 2005 fall firearms turkey hunting season to Oct. 1–31. The bag limit remains two birds of either sex, but hunters will be allowed to take both birds in one day. In the past, hunters could take only one turkey per day. Staff will track the harvest to ensure that it does not exceed 10 percent of the statewide turkey population.  
 Continues for a third year the trial of the four-point antler restriction in 29 counties during the archery season and all portions of the firearms season except the youth portion.  
 Extends rabbit trapping season, now from Nov. 15–Feb. 15, so it will be concurrent with the primary trapping season for furbearers.

### General:

Bans computer-assisted hunting in locations removed from the location of the hunter.  
 Lists a number of mussels as species of conservation concern.  
 Prohibits the guiding of hunters, for pay, on conservation areas.  
 Establishes a new list of wildlife species that may not be possessed to protect Missouri against invasive species such as the snakehead fish, mongoose, pink starling, rusty crayfish, and zebra mussel.





**Programs and Partnerships:** Provides more than \$270,000 in grants to more than 140 volunteer fire departments to help fund protective clothing, equipment, and training.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,396,316 to counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$11.7 million has been paid to Missouri counties in lieu of taxes.

Approximately 803 private landowners receive nearly \$1.3 million in cost-share funds to implement habitat management practices for fish, forest, and wildlife resources. The funds help install 1,431 individual conservation practices.

Signs agreement with U.S. Department of Agriculture Farm Service Agency and the Missouri Association of Soil and Water Districts to provide up to \$2 million in incentive payments for landowners enrolling in the Conservation Reserve Program for a duration of 10–15 years. The program is aimed at water quality and bobwhite quail and results in the planting of more than 26,000 acres of native grasses.

Staff make more than 7,000 on-site landowner visits to offer technical assistance to landowners who want help with

habitat management plans and handles 3,968 requests for wildlife nuisance and/or damage assistance, including 883 on-site visits.

Improves habitat for quail and grassland songbirds on more than 10,700 acres of private land.

The U.S. Fish and Wildlife Service approves the Department's Comprehensive Wildlife Strategy, the first landscape conservation strategy for "all wildlife" in Missouri. The strategy involved participation from many conservation partners, other agencies, and private landowners. The Conservation Opportunity Areas identified in the strategy become the statewide framework for investing in the best places for conservation success.

Reports that Telecheck implementation is successful. Information about the deer and turkey harvest is immediately available for enforcement and management—and at a much lower cost.

The Department and Ducks Unlimited announce the Golden Anniversary Wetlands Initiative—a partnership



to restore and improve Missouri's historic wetlands including Fountain Grove, Duck Creek, Schell-Osage, Ted Shanks, and Montrose conservation areas.

Recruits the 3,000th Stream Team.

Reports the Department now has agreements with 113 partners for the cooperative management of 145 public lakes, 41 stream-access areas, four lake-access areas, and six aquatic resource-education ponds through the Community Assistance Programs and the closely related Corporate and Agency Partnership Program.

Launches the Heartland Tree Alliance to connect Kansas City residents with their urban and community forests through participation in volunteer projects. This collaboration includes the Department, the U.S. Forest Service, Kansas Forestry Department, and Bridging the Gap.

Develops 180 Landowner Forest Stewardship Plans.

Through the Share the Harvest program, more than 5,000 deer hunters donate 267,000 pounds of venison.

**Programs and Partnerships: Fish hatcheries stock 7.6 million fish in public lakes and streams.**



More than 2,200 volunteer instructors, and Department staff, conduct 1,024 Hunter Education courses and certify 27,003 students.

Distributes 5 million seedlings for planting to nearly 13,000 landowners.

## ADMINISTRATION

Lisa Allen is transferred from Private Land Services Division chief to State Forester and Forestry Division chief on March 3, 2006.

Stephen Wilson is transferred from assistant director to Private Land Services Division chief on May 1, 2006. He holds this position until April 4, 2007.

Manages 906 lakes and 40 stream management areas for public fishing.

More than 840,000 people buy fishing permits.

Expands the management of conservation areas to provide dove-hunting opportunities in more than 70 counties.

Approves a policy statement saying "It is not desirable to allow the reestablishment of a mountain lion population in Missouri" and amends a portion of the *Wildlife Code* by removing the mountain lion from the state endangered species list.

Commission approves a new strategic plan, *The Next Generation of Conservation*, which identifies nine goals and specific actions the Department will take to work with Missourians, and for Missourians, to achieve progress in statewide conservation efforts.

After the failure of the upper reservoir dam at the Taum Sauk hydroelectric facility in December 2005, staff collaborate with the Department of Natural Resources and project consultants on the design of the new stream channel within the state park and deal with flow issues associated with the lower reservoir recovery activities. Additional work is underway to resolve habitat restoration and mitigation issues associated with the removal of sediment from the lower reservoir and east fork of the Black River.

Leads efforts to replace low-water crossings with clear-span bridge structures at selected locations in south-central Missouri to improve fish passage for the Niangua darter, a federally and state-listed species of conservation concern, and other native aquatic species.

Designates the Chariton River Hills in Macon County as a Missouri Natural Area.

Establishes the Conservation Area Checklist (CACHE) online data-entry website. This helps capture bird observations by citizens and Department staff in a permanent database with built-in data analyses to benefit future conservation efforts.

Approves a zebra mussel prevention policy and a revised fire management policy.





**Programs and Partnerships:** Improves habitat for quail and grassland songbirds on more than 10,700 acres of private land.

Begins using *Monetary Values of Missouri Amphibians and Reptiles*, researched and compiled by Department herpetologist Jeff Briggler to calculate monetary losses and seek reimbursements for reptiles killed during a pollution spill.

Contracts for wetland renovation at Fountain Grove Conservation Area in Linn and Livingston counties; for water-supply renovation and dam stabilization at Roaring River Fish Hatchery in Barry County; for spillway and dam modifications at August A. Busch Memorial Conservation Area in St. Charles County; Shepherd of the Hills Fish Hatchery upgrade project in Taney County; oxygenation system at Roaring River Fish Hatchery in Barry County; electrical upgrade at Blind Pony Hatchery in Saline County; oxygenation system at Montauk Fish Hatchery in Dent County; Red Star Access upgrade on the Mississippi River in Cape Girardeau County; exhibit renovations at Powder Valley Conservation Nature Center and other Department facilities; and four projects on the lower Osage River and Lake of the Ozarks using a \$1 million settlement from AmerenUE.

Develops *Conserving Missouri's Aquatic Ecosystems*, for grades 6–8, as part of the Learning Outdoors school program.

Publishes the major revision to volume 2 of Steyermark's *Flora of Missouri* in cooperation with the Missouri

Botanical Garden. The 1,181-page encyclopedic reference tool describes 900 species. Written by Department botanist George Yatskievych.

Publishes the book *Show-Me Bugs*. The 132-page book is a colorful field guide to 50 bugs in Missouri. Written by Michael Reinke and illustrated by Steve Buchanan.

Graduates 17 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases or receives donations of 2,944 acres, including 790-acre Dark Cypress Conservation Area in Bollinger County and LaBarque Creek Conservation Area in Jefferson County.

## MILESTONES AND NOTABLE EVENTS

The Missouri Department of Natural Resources presents a Missouri Lewis and Clark Bicentennial Commission Legacy Award to the Conservation Commission for several notable Lewis and Clark bicentennial projects.

Invasive zebra mussels are first discovered in Missouri's inland waters at Lake of the Ozarks.

Dispatches a contingent of conservation agents to the State of Louisiana to assist with rescue efforts during the aftermath of Hurricane Katrina.



## CONSERVATION COMMISSION

Stephen C. Bradford, *chairman*  
 William F. “Chip” McGeehan, *vice chairman*  
 Cynthia Metcalfe, *secretary*  
 Lowell Mohler, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2007 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$103,332,575
Permit Sales .....	\$30,953,155
Federal Reimbursements .....	\$23,210,639
Sales and Rentals .....	\$8,947,515
Interest .....	\$1,267,398
Other Sources .....	\$3,965,239
<b>Total Receipts .....</b>	<b>\$171,676,521</b>

#### DISBURSEMENTS

Fisheries .....	\$11,908,332
Forestry .....	\$15,410,871
Wildlife .....	\$16,074,091
Protection .....	\$14,181,263
Outreach and Education .....	\$15,383,196
Private Land Services .....	\$8,775,673
Resource Science .....	\$12,075,236
Administration .....	\$2,550,447
Administrative Services and Human Resources .....	\$28,646,718
Design and Development .....	\$12,188,760
Regional Public Contact Offices .....	\$3,296,676
County Assistance Payments .....	\$1,396,404
Capital Improvements .....	\$22,855,287
<b>Total Disbursements .....</b>	<b>\$164,742,954</b>

*No money from the state's general revenue goes to MDC.*



**Notable Wildlife Code Changes:** Prohibits snagging, snaring, and grabbing shovelnose sturgeon, to help protect these fish, which are often in high demand for their eggs.

### NOTABLE WILDLIFE CODE CHANGES

#### Fishing:

To discourage the spread of bighead and silver carp (exotic nuisance species) to other waters, these two species may be used as dead or cut bait, but not as live bait.

Adds trout stocking in Sedalia and Kirksville to supplement winter trout fishing opportunities.

Requires Illinois commercial fishermen to be licensed in Missouri if they want to fish and harvest shovelnose sturgeon from the Missouri portion of the Mississippi River adjacent to Illinois.

Approves the use of atlatls, a historic hunting tool, to be used to take nongame fish following the same regulations as when gigging fish and to take small game.

Stipulates that all arrows or darts may not contain drugs, poison, chemicals, or explosives.

#### Hunting and Trapping:

Establishes a youth season to provide more quail and pheasant hunting opportunities.

Maintains the current pilot study of 4-point antler restrictions in northern and central Missouri with no change for the 2006–2007 deer season.

Expands opportunities for deer hunters by offering unlimited antlerless deer permits for many counties, no-cost any-deer and antlerless deer permits for resident landowners, and additional urban deer harvest opportunities help maintain deer populations at herd levels desired by landowners and hunters.

Changes the formula for setting opening day of spring turkey season from the Monday nearest April 21 to the third Monday in April, effective in 2007.

Prohibits the use of lead shot on 21 conservation areas effective March 1, 2007. These areas have large wetlands



where waterfowl and shorebirds concentrate in the fall and spring.

For the fall 2006 duck season, expands the Every Member Draws system that was initiated in 2004 at Eagle Bluffs and Otter Slough conservation areas, to now also include Bob Brown, Grand Pass, and Ten Mile Pond conservation areas. Unlike the traditional system where only one member could draw, the new system favors larger parties by allowing each party to use its best number to compete in the drawing. The intent of Every Member Draws is to provide more people a chance to hunt.

For the first time in over a decade, starting with the fall 2006 season, Missouri was able to offer 40 days of Canada goose hunting after Nov. 30 rather than 30 days as in previous years. While Missouri had up to five different zones for Canada geese, it now has a statewide season that includes an early segment during the beginning of October and a late segment that begins the day after Thanksgiving and remains open as long as the federal framework allows—Jan. 31.

Beginning with the fall 2006 waterfowl season, the Middle Zone is moved north to I-70 in central and western Missouri, based on a combination of the evaluation of harvest, migration, and weather data along with hunter input solicited through hunter surveys and nine public workshops during March 2001.

Approves permit fee increases effective March 1, 2007: Nonresident Fishing, \$35 to \$40; Daily Fishing, \$5.50 to \$7; Nonresident Small-Game Hunting, \$65 to \$75; Nonresident Fur Hunting and Trapping, \$80 to \$120; Nonresident Firearms Deer, \$145/\$170 to \$175; Nonresident Archery Deer and Turkey, \$120 to \$150; Nonresident Spring Turkey, \$145 to \$175; Nonresident Fall Turkey, \$95 to \$105.

New \$5 Resident National Guard and Reserve Small Game Hunting and Fishing Permit provides a lower-cost option for military who have been mobilized in the previous 12 months or are serving full-time.

Reduces the price of the Resident Cable Restraint Permit from \$25 to \$10; requires commercially manufactured breakaways used with cable restraints to be rated at 350 pounds.

Reduces the Resident Fur Dealer's Permit from \$300 to \$100; new Nonresident Fur Dealer's Permit is \$300.

Bans the use and possession of electronic calls and electronically activated calls while hunting species other than crows or furbearers.

After discussion with fur dealers, hunters, and trappers, the furbearer seasons are shortened by 15 days.

General:

Revised regulations for Class I and II wildlife breeders include keeping records of animals that have died or have

been sold, to discourage people from turning dangerous and exotic animals loose.

Regulates enclosures for hogs on big game hunting preserves to keep hogs from escaping and becoming nuisances.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,396,404 to counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$12.4 million has been paid to Missouri counties in lieu of taxes.

The Natural Resources Conservation Service staff 11 wildlife-emphasis soil conservationists in return for partial reimbursement from the Department to increase emphasis on bobwhite quail and other wildlife habitat improvements as well as build on U.S. Department of Agriculture Farm Bill conservation program successes. This agreement is a first of its kind in the nation and is a precursor to private land conservationist positions hired upon formation of the Private Land Services Division in 1999.

A governor-appointed Feral Hog Task Force is formed to develop a plan for Missouri that addresses feral hog issues. The directors of both the Department and also the Missouri Department of Agriculture are designated as co-chairs.

Completes the *Missouri Aquatic Nuisance Species Management Plan* and drafts the *Missouri Emerald Ash Borer Action Plan*.

The Show-Me Missouri Fish Mobile Aquarium program ends after reaching an estimated 6 million people.

The Stream Stewardship Trust Fund awards \$690,000 in grants to Department projects, to protect 70 acres of stream channel and 276 acres of riparian corridor. The Missouri Conservation Heritage Foundation administers the program and funds.

The Department works with other resource agencies and AmerenUE to determine how to design, construct, and install a fish barrier net in front of the turbines of Bagnell Dam. Other collaborative efforts regard water-quality enhancement measures to be taken within the operation of Bagnell Dam, and 82 miles of water quality and habitat improvements on the Osage River below Bagnell Dam.

Jointly sponsors, with the Missouri Forest Products Association, logger training courses aimed at educating loggers about forest management principles. More than 250 loggers participate.

Works with several agencies to restore forest, fish, and wildlife resources affected by the collapse of the Upper Taum Sauk Dam. Efforts focus on construction of a new stream channel through Johnson's Shut-Ins State Park, removal of silt from Lower Taum Sauk Reservoir and the east fork of the Black River, and flow releases from the lower reservoir.



***Programs and Partnerships:*** The Department becomes the state-coordinating agency for the National Archery in the Schools Program (NASP), with the Conservation Federation of Missouri. The program is designed to teach target archery in grades 4–12, and is commonly referred to as MoNASP.

Department foresters visit every sawmill, post mill, chip mill, pole mill, and charcoal plant to determine timber usage, sustainability of Missouri's forests, and to calculate the economic impact of Missouri's forest products industry.

In the pilot year of Learning Outdoors school program, 33 middle schools with 2,431 students receive grants, and an additional 318 schools receive conservation grants for outdoor classrooms, equipment, and field trip expenses. Grants to schools exceed \$185,000.

Reports more than 1 million visitors at conservation nature centers and shooting range/outdoor education centers. These facilities offer a wide variety of programs, with more than 300,000 participants.

In cooperation with the U.S. Forest Service, provides more than \$281,000 in grants to more than 140 volunteer fire departments. These grants help fund protective clothing, equipment, and training.

Trains more than 565 local firefighters in fire behavior, suppression techniques, and safety at no cost to the fire departments or the volunteers.

Through the Share the Harvest program, 6,580 hunters donate 322,500 pounds of venison.

Reports the Department has agreements with 114 partners for the cooperative management of 146 public lakes (9,236 acres of water), 41 stream-access areas, four lake-access areas, and six aquatic-resource education ponds through the Community Assistance Program and the closely related Corporate and Agency Partnership Program.

Enters into agreement with the Jackson County Parks and Recreation for operation of Lake City Shooting Range and Education Center, a manned outdoor shooting range.

Manages 924 lakes and 40 stream management areas for public fishing.

Fish hatcheries stock 9.6 million fish in public lakes and streams.

Initiates the nation's first National Fish Habitat Initiative project at Table Rock Lake and Lake Taneycomo to enhance fish habitat and improve fishing opportunities.

Distributes 4.7 million seedlings for planting to nearly 12,000 landowners.

Develops 152 Landowner Forest Stewardship Plans.

Helps private landowners achieve long-term conservation of natural resources and their land-use objectives by



delivering nearly \$1.1 million in cost-share funds to 607 private landowners; by providing on-site technical assistance to 9,665 private landowners; improving habitat for quail and grassland songbirds on more than 13,000 acres of private land; and helping landowners enroll almost 5,800 acres in the Wetland Reserve Program. More than 2,200 volunteer instructors, and Department staff, conduct 1,066 Hunter Education courses and certify 25,000 students. Initiates the Conservation Equipment Grant program, which targets organizations that assist the Department with delivering private-land habitat programs and technical assistance to private landowners. The Department awards approximately \$100,000 in grants to 12 separate organizations.

## ADMINISTRATION

William Lueckenhoff is promoted from Design and Development chief to Design and Development Division chief on Aug. 16, 2006. He holds this position until June 30, 2010.

Bill McGuire is promoted from Private Land Services field chief to Private Land Services Division chief on May 18, 2007. He holds this position until June 30, 2010.

Actively manages habitat on 21,752 acres of grassland and prairie, 41,259 acres of marsh and wetlands, 580 acres of glades, 45,000 acres of forest, 9,250 acres of savannas, and 15,977 acres of old field.

Leads the implementation of the Missouri Comprehensive Wildlife Strategy (CWS). CWS is a way of approaching conservation planning and implementation that integrates projects and initiatives with conservation partners, other agencies, and private landowners. Grants and new money total at least \$5 million this year.

Staff and volunteers provide more than 700 instructional programs in hunting, fishing, trapping, and shooting sports to more than 45,000 people.

Completes a comprehensive update to the Department's online conservation atlas. A companion regulations database, linked to the atlas, provides information on regulations and seasons relating to hunting, fishing, camping, and other outdoor activities.

Approves the plan *Recommendations for Recovery of Greater Prairie Chicken in Missouri*.

Contracts for Phase 2 construction at the Twin Pines Conservation Education Center renovation project in Shannon County; Seventy-Six Conservation Area boat ramp project in Perry County; Ted Shanks Conservation Area wetlands restoration project in Pike County; Columbia Bottom Conservation Area projects; and Blind Pony Fish Hatchery aeration system project in Saline County.

Designates three new natural areas: Alley Spring Natural Area in Shannon County, Auxvasse Natural Area in Callaway County, and Spring Creek Gap Natural Area in Maries County.

Graduates 19 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Reports that more than 833,543 people buy fishing permits, making fishing one of the most popular outdoor activities in Missouri.

Manages 438,700 acres of public forestland, monitoring insect and disease threats and facilitating development of the state's forest industry.

Purchases or receives donations of 1,574 acres, including 437-acre Bohigian Conservation Area in Phelps County.

## MILESTONES AND NOTABLE EVENTS

Bill White, Private Land Program supervisor, receives the national 2007 Fish and Wildlife Conservation Award from the U.S. Department of Agriculture Natural Resources Conservation Service for efforts to expand and enhance the partnership with U.S. Department of Agriculture.

February 2007 marks the 50th anniversary of hunter education in Missouri. Along with that anniversary, the Missouri Hunter Education program recognizes its millionth graduate, a milestone that few states have reached. The hunting incident rate in Missouri has been reduced by more than 70 percent since 1988, when Missouri made Hunter Education certification a requirement for purchasing firearms hunting permits.

**Administration:** Improves horse trails on several Department areas by eliminating hazards to riders, providing for year-round horse-trail riding, and reducing some erosion resulting from heavy public use.



## CONSERVATION COMMISSION

**William F. “Chip” McGeehan, *chairman***

**Lowell Mohler, *vice chairman***

**Don R. Johnson, *secretary***

**Becky L. Plattner, *member***

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2008 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$102,940,809
Permit Sales .....	\$30,797,567
Federal Reimbursements .....	\$18,563,048
Sales and Rentals .....	\$7,998,157
Interest .....	\$1,755,844
Other Sources .....	\$9,897,979
<b>Total Receipts .....</b>	<b>\$171,953,404</b>

#### DISBURSEMENTS

Fisheries .....	\$12,444,886
Forestry .....	\$16,071,586
Wildlife .....	\$16,640,868
Protection .....	\$13,879,942
Outreach and Education .....	\$15,412,405
Private Land Services .....	\$8,992,253
Resource Science .....	\$11,677,559
Administration .....	\$3,198,077
Administrative Services and Human Resources .....	\$36,009,544
Design and Development .....	\$12,149,619
Regional Public Contact Offices .....	\$3,199,101
County Assistance Payments .....	\$1,451,829
Capital Improvements .....	\$16,165,002
<b>Total Disbursements .....</b>	<b>\$167,292,671</b>

*No money from the state’s general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Fishing:

Rescinds the experimental hand-fishing season due to research findings.

Adds Everyday Pond at Missouri Western State University in St. Joseph as the latest addition to the popular winter trout-fishing program that now includes 25 lakes around the state.

Sets 8-inch minimum length limit for rock bass (goggle-eye) on portions of the Meramec River.

Prohibits privately owned boats on Blind Pony Lake, Hunnewell Lake, and Lake Paho conservation area lakes that supply water to fish hatcheries in an effort to keep exotic zebra mussels from establishing and damaging the hatchery system.

Allows the use of atlatls to take fish, except at blue-ribbon trout fishing areas.

### Hunting and Trapping:

Introduces new Apprentice Hunter Authorization Permit (\$10), which allows adult novice hunters to purchase

**Notable Wildlife Code Changes:** Designates both the Hunting Method Exemption program and the Group Fishing program to assist disabled hunters and provide opportunities for educational or rehabilitation groups to experience fishing.





firearms permits for hunting when in the immediate presence of a properly licensed hunter 21 years old or older. All-day hunting, until sunset, is now permitted during the youth spring turkey season.

General:

Requires owners of bears, mountain lions, wolves, and their hybrids to identify each individual with a microchip embedded under the animal's skin, and the owner must submit a blood or tissue sample for DNA analysis. All animals must also be registered with the Department to aid enforcement of illegal sales and to help distinguish escaped and released captives from wild animals.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,451,829 to Missouri counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$13.1 million has been paid to Missouri counties in lieu of taxes.

Submits *The Governor's Feral Hog Task Force* report, which is signed by the governor.

The Stream Team program grows to more than 3,700 teams whose volunteers spent 197,460 hours working on their adopted streams. Since the program began in 1989, volunteers have spent more than a million hours protecting and improving Missouri streams.

The Stream Stewardship Trust Fund awards grants to seven projects totaling \$467,000 to protect 66 acres of stream channel and 134 acres of riparian corridor. The Missouri Conservation Heritage Foundation administers the program and funds.

Initiates the Go Fish, Interpret, and Share our Heritage (GO FISH!) angler education pilot program—a five-year angler recruitment program where staff and volunteers teach fishing and environmental stewardship to St. Louis area children.

The Department and The Nature Conservancy complete a study assessing flora and vegetation of potential pine restoration sites on Department lands.

Provides, in cooperation with the U.S. Forest Service, more than \$376,748 in grants to more than 183 volunteer fire departments to help fund protective clothing, equipment, and training.

Helps develop the Missouri Master Logger Certification program, including awarding a \$20,000 grant to the Missouri Forest Products Association to help start this volunteer program, where a logger agrees to uphold the standards set by the program.

Reports the Department has agreements with 118 partners for the cooperative management of 158 public lakes (9,634 acres of water), 42 stream-access areas, four lake-access

areas, and six aquatic resource education ponds through the Community Assistance Program and the closely related Corporate and Agency Partnership Program.

Increases Tree Resource Improvement and Maintenance cost-share program funds by \$250,000 to be awarded to communities in response to the destructive ice storms that hit southern Missouri.

Membership in the Missouri Forestkeepers Network increases to 2,000 people.

Staff and volunteers provide more than 1,500 instructional programs in hunting, fishing, trapping, and shooting sports to more than 45,000 people.

More than 1,780 volunteer instructors, and Department staff, conduct 968 Hunter Education courses and certify 25,288 students, and pilot an online Hunter Education training module.

Launches Discover Nature Schools to make the Department's educational offerings more recognizable, with programs for families, women, and schools to be known under the "Discover Nature" umbrella.

Launches the Discover Nature Schools middle-school unit statewide. Seventy-one schools with 3,041 students receive grants. Field trip grants help 22,204 students at 194 schools get outdoors. Awards outdoor classroom grants to 27 new schools, totaling \$202,000.

Provides nearly \$1.2 million in cost-share funds to 634 private landowners to implement habitat management practices for fish, forest, and wildlife to help install 1,104 conservation practices, impacting nearly 40,000 acres.

Develops 35 partnerships with federal, state, and non-governmental organizations. These partnerships help the Department enhance technical and financial assistance and equipment support to landowners interested in improving forest, fish, and wildlife resources. One example is the Department assisting the U.S. Department of Agriculture with developing and applying \$150 million in Farm Bill conservation programs.

Implements ecosystem-based management necessary for the conservation and enhancement of natural and recreational resources of the Missouri, Mississippi, and White rivers. They help direct the implementation of \$54 million available through the Missouri River Fish and Wildlife Mitigation Project for habitat restoration, \$16.8 million available through the Mississippi River Environmental Management Program for biological monitoring and habitat restoration, and \$10 million available for planning efforts within the proposed Mississippi River Navigation and Ecosystem Sustainability program.

Reports more than 40 Missouri schools will have adopted the Missouri National Archery in Schools program in grades 4–12 by the end of 2008. Many of these schools receive reimbursement grants up to \$500 toward archery equipment, and more than 5,500 students participate.



**Programs and Partnerships: Adopt-A-Trail volunteers spend 963 hours monitoring, maintaining, and enhancing trails and trailheads.**

Manages 906 lakes and 40 stream management areas for public fishing and provides stream and lake management assistance to more than 8,600 private landowners.  
 Stocks more than 11 million fish in public lakes and streams.  
 Distributes 5 million seedlings for planting to nearly 12,400 landowners.  
 Delivers nearly \$1.2 million in cost-share funds to private landowners.  
 Provides on-site technical assistance to 10,602 private landowners.  
 Improves habitat for quail and grassland songbirds on more than 27,000 acres of private land.  
 Helps landowners enroll almost 2,415 acres into the Wetland Reserve Program.  
 Provides forestry assistance on more than 50,000 acres and facilitates Environmental Quality Incentives Program projects totaling more than \$725,000 on private land.

Through the Share the Harvest program, more than 5,500 deer hunters donate more than 260,000 pounds of venison.  
 Protection Division holds first Discover Nature Girls Camp event in northeast region, an event designed to introduce young women to hunting, fishing, and other outdoor recreational opportunities.  
 Agents partner with the Missouri State Water Patrol (now a division of the Missouri State Highway Patrol) to certify officers and agents in advanced swift water rescue techniques that can be used to protect life and property during flooding and other natural disasters.  
 Issues 3,055 hunting method exemptions to help disabled hunters and 260 group-fishing permits to Missourians who otherwise might not be able to participate and learn about fishing.

## ADMINISTRATION

David Erickson is promoted from Wildlife Division chief to assistant director on Oct. 1, 2007. He holds this position until Oct. 31, 2009.  
 Tim Ripperger is promoted from protection field chief to assistant director on May 1, 2008.  
 DeeCee Darrow is promoted from wildlife management chief to Wildlife Division chief on Dec. 16, 2007. She holds this position until July 31, 2012.  
 Ron Dent is promoted from resource science field chief to Resource Science Division chief on Dec. 16, 2007. He holds this position until June 30, 2010.  
 Bill Turner is promoted from fisheries program coordinator to Fisheries Division chief on May 1, 2008. He holds this position until June 30, 2010.  
 Larry Yamnitz is promoted from protection field chief to Protection Division chief on May 1, 2008.  
 Approves an agreement with Columbia and the U.S. Army Corps of Engineers to supply water for Eagle Bluffs Conservation Area.  
 Enters contract for roof replacement at Conservation Commission Headquarters in Jefferson City; Blind Pony Fish Hatchery fish production ponds renovation project in Saline County; Wigwam School Access project at Lake of the Ozarks in Morgan County; and Lake City Range relocation and renovation project in Jackson County.  
 Designates two new Missouri Natural Areas: Razor Hollow Natural Area, within Daniel Boone Conservation Area in Warren County; and Spiderlily Natural Area, within Mudpuppy Conservation Area in Ripley County.  
 Revises and refines the way the Department manages forests using the *Forest Land Action Guidelines*, to help natural resource managers evaluate, understand, and sustainably manage Missouri's forest and woodland communities.  
 Completes approximately 70,000 acres of quail and grassland-bird friendly habitat work on conservation





***Milestones and Notable Events:*** Opens the Twin Pines Conservation Education Center in Shannon County. It places a special emphasis on the history of the Ozarks' timber industry and includes vintage logging equipment, a log cabin, and an early 20th century schoolhouse.

areas each year. Efforts to reduce the decline of quail, prairie chickens, and other grassland bird populations remain top Department priorities.

The Department emphasizes the restoration and management of productive natural communities, by actively managing habitat on 20,607 acres of grassland and prairie, 37,745 acres of marsh and wetlands, 11,026 acres of glades, 48,223 acres of forest, 18,084 acres of savannas, and 18,539 acres of old field.

Implements a joint statewide mail survey of horseback-riding enthusiasts in cooperation with the Missouri Department of Natural Resources, National Parks Service, and the U.S. Forest Service to develop a plan for equestrian use on public lands in the state.

Internal auditors perform seven internal audits to ensure that public funds are expended in a responsible manner. There are no major findings.

Employs a variety of scientifically sound measures to assess public opinions, expectations, and recreation participation to guide decisions about regulations and forest, fish, and wildlife management. This year, there are 58 activities that involve 92,365 people, which includes public information surveys, focus groups, and public meetings.

The Department creates a Facebook page to encourage further social media connections with Missourians. The public can ask questions, get news, participate in contests, and discuss issues with other people interested in the outdoors.

Purchases or receives donations of 1,631 acres, including 583-acre Windy Bar Island Conservation Area in Cape Girardeau County.

## MILESTONES AND NOTABLE EVENTS

Sept. 30, 2007: Natural Biodiesel Plant, LLC releases 187,233 gallons of glycerin by-product causing an extensive kill in Bell Fountain Ditch in Pemiscot County in the Bootheel. The Department begins a multi-agency investigation with the Department of Natural Resources, Arkansas Game and Fish Commission, U.S. Fish and Wildlife Service, and the Environmental Protection Agency. The Department finds an estimated 25,088 fish, 4 crayfish, and 686 mussels dead on-site. Eighty-four of the mussels are federally endangered fat pocketbook, which elevates the case to a federal level. The responsible party pleads guilty to one felony act of violating the Clean Water Act and is sentenced to two years of probation.

## CONSERVATION COMMISSION

William F. “Chip” McGeehan, *chairman*

Lowell Mohler, *vice chairman*

Don R. Johnson, *secretary*

Becky L. Plattner, *member*

## CONSERVATION BY THE NUMBERS

### FISCAL YEAR 2009 SUMMARY

#### RECEIPTS

Conservation Sales Tax .....	\$96,571,218
Permit Sales .....	\$32,056,614
Federal Reimbursements .....	\$24,165,283
Sales and Rentals .....	\$8,601,439
Interest .....	\$1,049,928
Other Sources .....	\$6,530,587
<b>Total Receipts .....</b>	<b>\$168,975,069</b>

#### DISBURSEMENTS

Fisheries .....	\$12,563,006
Forestry .....	\$16,051,758
Wildlife .....	\$16,338,979
Protection .....	\$13,505,810
Outreach and Education .....	\$15,186,325
Private Land Services .....	\$7,630,877
Resource Science .....	\$11,392,711
Administration .....	\$3,349,974
Administrative Services and Human Resources .....	\$30,661,827
Design and Development .....	\$12,134,219
Regional Public Contact Offices .....	\$3,583,989
County Assistance Payments .....	\$1,453,573
Capital Improvements .....	\$21,777,980
<b>Total Disbursements .....</b>	<b>\$165,631,028</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

### Hunting and Trapping:

Extends the 4-point restriction for antlered deer from 29 to 65 counties.

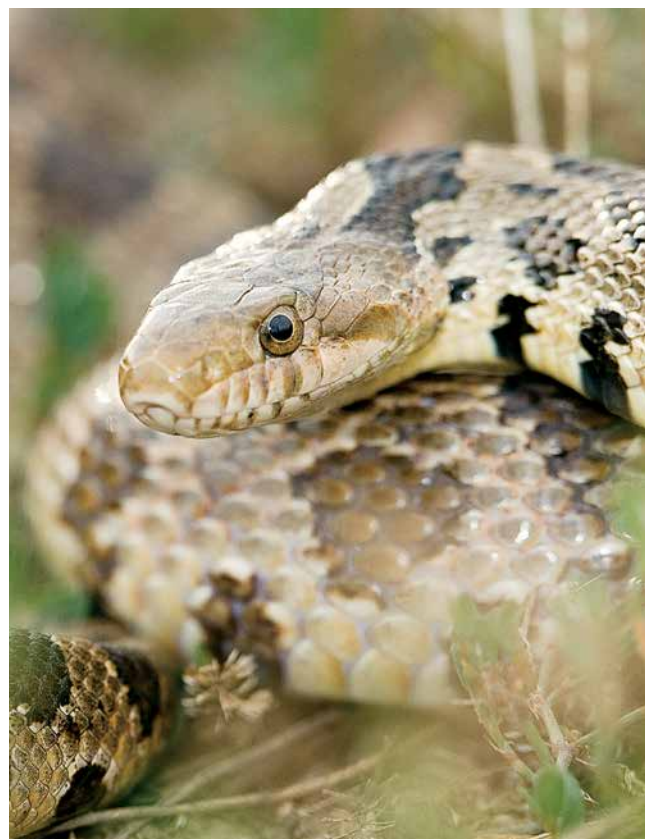
Introduces the first late youth portion to deer season, Jan. 3–4, 2009.

Removes unlimited availability of firearms antlerless permits in 18 southwestern counties in response to decreasing deer numbers because of over-harvest.

### General:

Allows nonresident military veterans who have service-related disabilities of 60 percent or more or who were prisoners of war during military service the same hunting and fishing permit exemptions as resident disabled veterans and allowing such nonresident veterans to purchase resident permits.

**Notable Wildlife Code Changes:** Adds the dusty hog-nosed snake, Kirtland's snake, and western fox snake (below) to the list of native species prohibited for personal collection. Both the dusty hog-nosed snake and Kirtland's snake were considered extirpated from Missouri but have been rediscovered here. Adding the three species to the list will afford protection to assure sustainable populations.







***Programs and Partnerships:*** Connects more than 30,600 Missouri children with nature through Discover Nature Schools instructional units and grants. The middle school aquatic unit is adopted by 72 schools. The elementary unit, *Nature Unleashed*, is piloted by 21 schools. Grants supporting the two school units total \$114,000. Conservation field trip grants help 20,273 students get outdoors. Outdoor classroom grants are awarded to 34 schools. Conservation grants to schools exceed \$238,500.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,453,573 to counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$13.8 million has been paid to Missouri counties in lieu of real estate taxes.

The Department, in cooperation with the U.S. Forest Service, provides \$381,886 in grants to 178 volunteer fire departments to help fund protective clothing, equipment, and training. Equipment is also provided to fire departments through two federal programs: the Federal Excess Personal Property Program, which obtained equipment valued at \$316,695; and the new Fire Fighter Program, which obtained equipment valued at \$11,591,225.

Reports the Department now has agreements with 116 partners for the cooperative management of 166 public lakes, 42 stream access areas, four lake access areas, and six aquatic resource education ponds through the Community Assistance Program and the closely related Corporate and Agency Partnership Program.

Supports a two-year effort to promote wildfire prevention in southwestern Missouri by endorsing a third-party U.S. Forest Service Hazard Mitigation grant to the Southwest Resource Conservation and Development Program. This area is severely hit by the January 2007 ice storm, and the resulting woody debris in the forests makes wildfire suppression more difficult and hazardous to firefighters.

Provides an additional \$250,000 to be awarded to communities through the Tree Resource Improvement and Maintenance cost-share program in response to the destructive ice storms that hit southern Missouri.

Launches the Call Before You Cut program to encourage landowners to have the best possible information before having a timber sale.

This year, 13,776 students from 82 schools participate in Missouri National Archery in the Schools Program.

Manages more than 60 urban lakes for fishing. Stocks more than 158,000 keeper-sized fish in these lakes; including almost 97,000 channel catfish, more than 46,000 rainbow trout, and 15,000 brown trout.



The Missouri Walleye Management Plan is developed and approved.

The *Missouri Aquatic Nuisance Species Management Plan* is approved in September 2008. The Department receives an annual federal grant to implement many of the Department's efforts related to aquatic invasive species.

A fish barrier net, one of the largest exclusion nets in the country, is successfully installed in front of Bagnell Dam in Lake of the Ozarks. Net installation is part of the fish protection efforts arising from a 2005 settlement with AmerenUE. The net will prevent fish from entering the dam's turbines and trash racks.

Grow Native! program is credited with helping to boost sales of native plants in Missouri, which increased 70 percent between 2003 and 2008.

Nearly \$1 million in cost-share funds goes to 523 private landowners to implement beneficial habitat management practices for forest, fish, and wildlife resources. The funds helped install 921 individual conservation practices, impacting nearly 12,000 acres.

The Stream Stewardship Trust Fund funds 15 Department projects totaling \$1.1 million, which protect 83 acres of stream channel and 616 acres of riparian corridor. The Missouri Conservation Heritage Foundation administers the program and funds.

Volunteers spend 1,130 hours monitoring, maintaining, and enhancing trails on conservation areas.

Distributes about 4.5 million seedlings for planting to nearly 12,000 landowners.

Provides forestry assistance on more than 100,000 acres and facilitates Environmental Quality Incentives Program projects totaling more than \$725,000 on private land.

Provides service through 63,986 rural and urban landowner contacts; affects 327,181 acres through technical assistance to landowners; provides habitat management workshops to 34,959 attendees, and helps enroll 14,000 acres in the Conservation Reserve Program's State Acres for Wildlife Enhancement practice.

The Managed Deer Hunt program coordinates 90 managed hunts. 6,988 hunters participate and harvest 1,942 deer.

Through the Share the Harvest program, 4,465 hunters donate 249,156 pounds of venison.

More than 1,780 volunteer instructors, and Department staff, conduct 937 Hunter Education courses and certify nearly 25,000 students.

The Southern Wings Program to build international partnerships for bird conservation is proposed by the Department and subsequently endorsed by the Bird Conservation Committee of the Association of Fish and Wildlife Agencies (AFWA) in September 2008. It is endorsed as an AFWA program in March 2009, the Department was the first contributor in May 2009.

Scott and Cass counties become the first two counties in the nation to meet quail habitat management objectives under the Northern Bobwhite Conservation Initiative. The *Conservation Monitor* telephone survey is conducted by Gallup, Inc.

## ADMINISTRATION

This fiscal year, the Department completes about 103,000 acres of quail and grassland bird habitat work on conservation areas throughout the state. On conservation areas designated as Quail Emphasis Areas, more than 19,000 acres of quail and grassland bird habitat are completed. In addition, the Department establishes 34 private-land quail focus areas throughout the state in places where landowners are managing their property for quail.

Conducts habitat management on approximately 187,000 acres of public land, with an additional 120 miles of edge habitat.

Conducts forest and woodland habitat improvement on 21,078 acres of state land, including thinning young trees on 3,052 acres, post-sale work on 1,048 acres, prescribed fires on 10,922 acres, and harvest of 6,056 acres.

Approves a new Missouri Natural Area at Union Ridge Conservation Area in Sullivan and Adair counties. Reports there are now 181 natural areas totaling 70,677 acres.

Contracts for the construction of the Fountain Grove Conservation Area water control structures replacement project in Livingston County; design of a new Central Region office building in Columbia; construction of a new Kansas City regional office at James A. Reed Memorial Wildlife Area in Jackson County; and construction of the Four Rivers Conservation Area office replacement project in Vernon County.

Provides more than 2,400 programs with instruction in hunting, fishing, trapping, and shooting sports involving more than 126,000 people.

Begins an online Hunter Education training module.

Removes three species from the state endangered species list because they are no longer threatened with extinction: bald eagle, barn owl, and western fox snake.

Manages 902 impoundments and stream areas for public fishing, and provides stream and lake management assistance to almost 8,600 private landowners.

Begins using Twitter to send updates on news, season openers, events, and trending topics to an increasingly mobile and web-friendly audience.

Develops a Department Flickr page, which allows photographers to share their Missouri nature photos digitally with others.

Purchases or receives donations of 2,446 acres, including 320-acre Wade and June Shelton Memorial Conservation Area in Dade County.





***Milestones and Notable Events:*** Honors the Missouri Department of Natural Resources for exemplary efforts in managing Bennett Spring State Park (above), Montauk State Park, and Roaring River State Park, and for their role as the Department's partner in management of these important trout fisheries.

## MILESTONES AND NOTABLE EVENTS

The invasive emerald ash borer is found in Wayne County prompting a federal and state quarantine affecting all ash trees and all species of firewood leaving designated counties.

The Stream Team program celebrates its 20th anniversary and signs up its 4,000th team. Last year, volunteers spend 137,488 hours working on their adopted streams.

The Springfield Conservation Nature Center celebrates its 20th anniversary. Since opening, nearly 2.2 million visitors have visited the nature center and more than 2.4 million have walked the trails.

Honors The James Foundation for exemplary efforts in managing Maramec Spring Park and their role as the Department's partner in management of the trout fishery for more than 50 years.

Conservation agents in the southwest region organize the first department-sponsored Wounded Warrior event. Wounded veterans are taken out on a guided deer hunt with cooperating landowners.

Newton County Conservation Agent Carl Engelbrecht retires after 50 years of dedicated service to the department.

News Services Coordinator Jim Low becomes the fifth Conservation Department staff writer to win the Outdoor Writers Association of America's highest conservation honor, the Jade of Chiefs. He joins Werner Nagel (1964), Dan Saults (1973), Jim Keefe (1980), and Joel Vance (1992) in being recognized for outstanding contributions to conservation.

Conservation agents receive the Distinguished Service Award from the Concerns of Police Survivors organization for long-term efforts to provide outdoor education and recreation opportunities to families of law enforcement officers killed in the line of duty.

For the first time in Missouri, more than 500,000 people possess some type of deer-hunting permit.

A contingent of conservation agents is dispatched to the State of Louisiana to assist with rescue efforts during the aftermath of Hurricane Gustav.

## CONSERVATION COMMISSION

William F. “Chip” McGeehan, *chairman*Becky L. Plattner, *vice chairman*Don R. Johnson, *secretary*Don C. Bedell, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 2010 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$93,854,189
Permit Sales .....	\$32,517,080
Federal Reimbursements .....	\$21,475,595
Sales and Rentals .....	\$7,047,301
Interest .....	\$512,826
Other Sources .....	\$2,402,727
<b>Total Receipts .....</b>	<b>\$157,809,718</b>

## DISBURSEMENTS

Fisheries .....	\$12,712,809
Forestry .....	\$16,158,171
Wildlife .....	\$16,953,315
Protection .....	\$14,845,064
Outreach and Education .....	\$14,796,239
Private Land Services .....	\$6,658,121
Resource Science .....	\$11,455,046
Administration .....	\$4,157,143
Administrative Services and Human Resources .....	\$26,582,346
Design and Development .....	\$11,757,655
Regional Public Contact Offices .....	\$2,911,354
County Assistance Payments .....	\$1,476,299
Capital Improvements .....	\$18,865,390
<b>Total Disbursements .....</b>	<b>\$159,328,952</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Beginning March 1, 2010, allows bowfishing 24 hours a day on rivers where commercial fishing is allowed, at the request of citizens interested in bowfishing tournaments.

Ice fishing tackle, or tip-ups, are now considered a pole-and-line method, to allow anglers to use this tackle in areas where only pole-and-line methods are allowed.

Allows bighead, common, grass, and silver carp to be harvested by handnet; anglers can keep those that jump into a boat or onto land, with no limit.

Mussels may no longer be taken and sold by commercial fishermen, because the number and populations of native mussels continue to be a concern due to polluted waters and exotic mussel species that compete for their habitat.

Establishes a Roe Fish Dealer Permit to help track commerce in roe, using permit requirements similar to other states.

Requires commercial fishermen to report all species of common snapping and softshell turtles harvested commercially.

Nonresident students who meet certain requirements may purchase resident hunting and fishing permits, starting July 1, 2009.

Residents and nonresidents age 15 or younger may purchase a Trout Permit at half price, starting July 1, 2009.

## Hunting and Trapping:

Establishes several changes to provide more opportunities for youth to hunt and trap, beginning July 1, 2009.

Beginning with the 2010 Conservation Order, hunters age 16 and older must purchase the new Conservation Order Permit to take snow, Ross', and blue geese: Resident (\$5) and Nonresident (\$40).

Expands the 4-point antler restriction to include rural parts of Cass and Jefferson counties and all of Ste. Genevieve County; eliminates antler-point restrictions from part of Franklin County included in the St. Louis urban zone.

Adds thermal imagery equipment to the list of prohibited hunting methods.

Increases the squirrel daily limit from 6 to 10, and possession limits from 12 to 20.

Eliminates otter and muskrat trapping zones. New statewide season runs from Nov. 15–Feb. 20 with no limit, which allows trappers to sell muskrats that are accidentally caught.

Nonresident youths, ages 6–15, are now permitted to hunt during the youth spring turkey season.

## General:

Transfers authority of monitoring chronic wasting disease (CWD) in captive deer herds to the Missouri Department of Agriculture. The Department will continue to test for CWD in wild deer.



Adopts consistent requirements of 18 years of age and Hunter Education certification (unless born before Jan. 1, 1967) for all hunting mentors, regardless of season, effective July 1, 2009.

Adds black carp, a snail- and mussel-eating fish from China; and the quagga mussels, an exotic species similar to the zebra mussel, on the prohibited species list.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,476,299 to Missouri counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$14.5 million has been paid to Missouri counties in lieu of real estate taxes.

On June 11, 2010, completes the \$6 million relocation and construction project of a new Lake City Shooting Range and Education Center. The facility sits on 63 acres of Landahl Park leased from Jackson County Parks and Recreation. The old Lake City Shooting Range in another part of Landahl Park is turned over to the Jackson County Sheriff's Department.

The Stream Stewardship Trust Fund awards grants to five Department projects, totaling \$707,000, to protect Missouri's stream and riparian corridor. The Missouri Conservation Heritage Foundation administers the program and funds.

The Stream Team program expands to 4,115 teams. Volunteers spend a total of 132,283 hours enhancing and restoring Missouri streams.

Reports the Department has agreements with 117 partners for the cooperative management of 170 public lakes, 42 stream-access areas, four lake-access areas, and eight aquatic resource education ponds through the Community Assistance Program and the closely related Corporate and Agency Partnership Program.

The Department, in cooperation with the U.S. Forest Service, provides \$298,894 in grants to 144 volunteer fire departments to help fund protective clothing, equipment, and training. The Department also provides equipment through two federal programs: the Federal Excess Personal Property Program, which obtains equipment valued at \$189,205, and the new Fire Fighter Program, which obtains equipment valued at \$15,515,088.

Through the Share the Harvest program, approximately 4,450 hunters donate 205,153 pounds of venison. Hunters who donate their entire deer receive a \$40 reduction in processing costs paid by the Conservation Federation of Missouri.

The Managed Deer Hunt program coordinates 90 managed hunts. 5,801 hunters participate and harvest 1,726 deer.

The Department and volunteers provide more than 2,400 programs with instruction in hunting, fishing, trapping, and shooting sports. More than 126,000 people participate.



***Programs and Partnerships:*** Reports that the 55 Missouri Bird Conservation Initiative (MoBCI) partner organizations are involved in nine projects across Missouri. MoBCI leverages the Department's grant funds of \$100,500 to produce a total contribution of \$345,150 dollars in cash and match for project work. Each year MoBCI plays a bigger role in linking Missourians with national and international bird-related initiatives.

More than 1,800 volunteer instructors, and Department staff, conduct 945 Hunter Education courses and certify nearly 30,000 students.

Stocks 8.9 million fish in public and private waters, including more than 144,000 keeper-sized fish stocked in 53 urban lakes.

Manages 933 impoundments and stream areas for public fishing.

Provides stream and lake management assistance to 7,204 private landowners.

Distributes about 3.8 million seedlings for planting to 9,700 landowners.

Provides forestry assistance on more than 61,000 acres of private land and to more than 200 municipalities.

Helps private landowners achieve long-term natural resource conservation objectives by providing service through 31,400 rural and urban landowner contacts; through technical assistance to landowners, thereby affecting 280,155 acres; by providing habitat management workshops to 40,486 attendees; by assisting the U.S. Department of Agriculture with enrolling 90,000 acres of cropland reflooding in the Migratory Bird Habitat Initiative.



**Programs and Partnerships:** The Master Naturalist program adds another 200 participants to this community-based, volunteer service program that totals 680 people and 11 chapters. Volunteers participate in more than 5,000 hours of advanced training and donate more than 20,000 hours of service.

Since 1992, the Department has assisted the U.S. Department of Agriculture Natural Resources Conservation Service in restoring critical wetland habitat. To date, Missouri has recorded 982 easements through the Wetland Reserve Program that covers 141,358 acres. These restored wetlands provide critical habitat and store water during floods—alleviating pressure downstream on levees, communities, and crops.

Missouri students in grades 4–12 learn target archery in class in the Missouri National Archery in the Schools Program (MoNASP). Enrollment of schools has doubled each year since MoNASP began in 2007. There are now 121 schools in the program. More than 20,000 students have participated in MoNASP.

## ADMINISTRATION

Director John Hoskins announces his intention to retire, effective Jan. 15, 2010. Hoskins has been the agency's director since July 2002.

Commission announces the selection of assistant director Robert Ziehmer as director-designate. He will be the Department's eighth director, succeeding Hoskins upon his retirement Jan. 15, 2010.

Thomas Draper is promoted from forestry regional supervisor to deputy director-resource management on Feb. 1, 2010.

Aaron Jeffries is promoted from private land programs supervisor to assistant to director-governmental relations on Dec. 16, 2009.

Tom Neubauer is promoted from compensation/benefits manager to Human Resources Division chief on Feb. 17, 2010.

Connects more than 39,000 Missouri children with nature through Discover Nature Schools instructional units and grants, with 104 schools utilizing the middle-school aquatic unit, 109 schools teaching the elementary habitats unit, and 91 schools using the Conservation K–3 Field Trip Grant. Completes a high school ecology unit, *Nature Unbound*. Conservation grants supporting Discover Nature Schools totaled \$134,724.

Launches *Xplor* magazine, targeted to children ages 7–12, to connect them with nature using fun, interesting stories, art, and photography. The free bimonthly magazine and companion website launch February 2010. The magazine has 29,605 Missouri subscribers, 406 out-of-state subscribers, and six international subscribers. With additional copies reaching schools and other outlets, the total circulation is 46,242 copies per issue.

Reports there are now 180 Missouri natural areas totaling 70,759 acres. The latest addition is the 120-acre Twenty-Five Mile Prairie Natural Area in Polk County.

Contracts for construction of the Blind Pony Fish Hatchery fish production ponds renovation project (Phase 2) in Saline County; Hunnewell Lake Conservation Area fish hatchery project in Shelby County; Jay Henges Shooting Range renovation project in St. Louis County; Roaring River Hatchery building improvements project in Barry County; Shepherd of the Hills Fish Hatchery connection to Branson City sewer project in Taney County; Bennett Spring Fish Hatchery new hatchery building and raceway improvements project in Laclede County; Central Regional Office project in Boone County; and the workshop and storage buildings at the Charles W. Green Conservation Area in Boone County.

Conducts three stakeholder meetings to present information and to gather public input pertaining to the management of blue catfish in Truman Reservoir and Lake of the Ozarks.

On Sept. 21, 2009, a settlement agreement is reached between the Missouri Attorney General, Department of Natural Resources (DNR), and Natural Biodiesel Plant, LLC. On Sept. 30, 2007, Natural Biodiesel Plant,



LLC, for the extensive kill in Bell Fountain Ditch in Pemiscot County. They are ordered to pay the State of Missouri for natural resource damages (dead animals), reimbursements for DNR and Department staff time spent on the investigation, and a penalty to the Pemiscot County School Fund for violating Missouri Clean Water and hazardous waste laws.

Adopts *Missouri Forest Action Plan*, to evaluate conditions, trends, threats, and opportunities facing our forests.

This assessment will assist conservation planning and implementation, and will integrate priority projects and initiatives with partners and other agencies.

The Department is awarded a \$6 million American Recovery and Reinvestment Act grant to partner with six schools to install wood-fired heating systems.

Approves implementation of a vacancy management plan that will hold an additional 134 full-time salaried positions vacant by July 1, 2011, to help ensure sound financial conditions during a continuing cycle of lagging revenues.

Publishes the book *Missouri's Wild Mushrooms*. A guide to hunting, identifying, and cooking the state's most common mushrooms, the 185-page book features color photographs and descriptions of 102 species. Written by Maxine Stone, past president of the Missouri Mycological Society.

Publishes the book *Show-Me Herps*. The 152-page book is a colorful field guide to 50 amphibians and reptiles. Written by John Miller and illustrated by Steve Buchanan.

Graduates 19 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases or receives donations of 804 acres, including a 130-acre addition to Union Ridge Conservation Area in Sullivan County.

## MILESTONES AND NOTABLE EVENTS

Private Land Services Division celebrates its 10th anniversary and is still recognized nationally as the only state fish and wildlife agency division of its kind.

Chronic wasting disease is first discovered in Missouri in Feb. 2010 at a private hunting preserve in Linn County.

The L-A-D Foundation dedicates a memorial for Allen Brohn, the Department's past assistant director, at the L-A-D Foundation's Hickory Canyons Natural Area.

Completes "Operation Pulling Wool," a joint investigation with the U.S. Fish and Wildlife Service, targeting the illegal use of dogs to hunt deer in the Ozarks. It uncovers hundreds of violations and results in 64 individuals being charged in state or federal court.

Completes "Operation Wall Hanger," involving an undercover conservation agent operating a taxidermy shop in Shannon County. The operation uncovers 426 violations and leads to 68 individual being charged with violating a variety of *Wildlife Code* regulations.

Spring 2010 marks the 50th anniversary of the modern turkey hunting season in Missouri.

**Administration:** Maintains a high level of active management on Department lands—especially for quail and grassland birds. Staff conducts habitat management activities on more than 200,000 acres of public land with an additional 95 miles of edge habitat.



## CONSERVATION COMMISSION

Becky L. Plattner, *chairman*Don R. Johnson, *vice chairman*Don C. Bedell, *secretary*William F. “Chip” McGeehan, *member*

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 2011 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$95,818,337
Permit Sales .....	\$31,590,358
Federal Reimbursements .....	\$22,653,214
Sales and Rentals .....	\$8,825,875
Interest.....	\$303,972
Other Sources .....	\$2,259,250
<b>Total Receipts .....</b>	<b>\$161,451,006</b>

## DISBURSEMENTS

Fisheries.....	\$12,740,577
Forestry.....	\$14,799,844
Wildlife .....	\$17,095,531
Protection .....	\$13,860,700
Outreach and Education .....	\$14,389,507
Private Land Services .....	\$6,852,347
Resource Science .....	\$10,415,660
Administration .....	\$3,163,614
Administrative Services and Human Resources.....	\$26,420,875
Design and Development.....	\$10,254,894
Regional Public Contact Offices .....	\$2,827,587
County Assistance Payments.....	\$1,478,695
Capital Improvements .....	\$17,101,172
<b>Total Disbursements .....</b>	<b>\$151,401,003</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Allows the use of underwater lights for bowfishing on lakes, ponds, and other impoundments.

## Hunting and Trapping:

March 1, 2011, the new e-Permits system enables sport hunters, trappers, and anglers to buy their permits online, print them out, and use them immediately. Although online permit buying has been available in Missouri since 2002, buyers had to wait up to two weeks for their actual permits to arrive by mail.

Deer and turkey permits will no longer include a removable transportation tag. Instead, the permit itself will be the transportation tag.

Allows the use of the atlatl—a rod or board-like device used to launch, through a throwing motion of the hand, a dart 5 to 8 feet in length—as a method for taking deer during the firearms deer season except for the muzzleloader portion; for taking bullfrogs and green frogs; and for taking fish under certain conditions.

For the first time in modern history, the Canada goose bag limit increases to three geese for the entire fall 2010 season. The liberalization is intended to provide more harvest opportunity for migrant giant Canada geese from Manitoba, Minnesota, and Iowa.

The Commission approves using formulas to set duck season dates. This change is intended to enable hunters to make plans further in advance. Previously, hunters had to wait until late August to find out the timing of duck season. Based on the new formulas: If the U.S. Fish and Wildlife Service announces a 60-day season, the season in the North Zone opens on the last Saturday in October, on the first Saturday in November in the Middle Zone, and on Thanksgiving Day in the South Zone. The formula allows the season to open about a week later in the event the U.S. Fish and Wildlife Service announces a 45-day season and two weeks later if they announce a 30-day season.

Closes the ruffed grouse season due to low population levels.

Cable restraint devices can now be used for the duration of the furbearer trapping season; and clarifies that only coyotes, red foxes, and gray foxes may be taken alive with cable restraints from Feb. 1 through the last day of February.

Adds Gasconade and Osage counties to the area where unlimited firearms antlerless deer permits are available and where hunting is allowed during the antlerless portion of firearms deer season.

## General:

Brings the Missouri state falconry regulations into compliance with federal guidelines.





**Administration:** On May 5, 2011, wild elk return to Missouri after an absence of 150 years. Six bull elk and 28 cows and calves arrive at Peck Ranch Conservation Area, within the 346-square-mile elk restoration zone. The elk were captured in December 2010 and January 2011, by Department staff in cooperation with biologists from the Kentucky Department of Fish and Wildlife Resources.

Adds nonnative marbled crayfish to the prohibited species list.  
Allows authorized individuals to carry concealed firearms while archery deer hunting or while turkey hunting with a bow during the fall firearms season or on an archer's permit.

## PROGRAMS AND PARTNERSHIPS

Pays \$1,478,695 to counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes, and county aid road trust payments. Since 1980, more than \$15.2 million has been paid to Missouri counties in lieu of real estate taxes.

Pilots a new draw system, called Quick Draw, for waterfowl hunters on three conservation areas that offer managed waterfowl hunting. This Web-based draw system allocates hunting opportunities at Eagle Bluffs, Grand Pass, and Otter Slough conservation areas.

Connects more than 78,000 Missouri children with nature through various Discover Nature Schools instructional units and grants. Reports 95 school districts have adopted the elementary habitats unit, 115 districts teach the middle-school aquatic unit, and 24 districts have adopted

the high school ecology unit. An additional 76 schools utilize Conservation K-3 Field Trip Grants. Completes a kindergarten through second-grade unit. Conservation grants supporting Discover Nature Schools total \$268,909.

The Stream Team program expands to 4,321 teams (85 percent still active), volunteering 146,361 hours to enhance and restore Missouri streams.

The Stream Stewardship Trust Fund awards grants to four Department projects, totaling \$158,585, to protect Missouri's stream and riparian corridors. The Missouri Conservation Heritage Foundation administers the program and funds.

Implements focused management efforts on priority watersheds statewide.

Approves and implements the Department's Feral Hog Eradication Plan. Reports that since 2009, the Department has captured 502 and euthanized 486 feral hogs as part of an eradication effort.

Signs an agreement with the Missouri Association of Soil and Water Districts to provide \$500,000 in incentives to landowners who sign up for the U.S. Department of Agriculture Conservation Reserve Program (CRP)

wildlife friendly buffer practices or manage their CRP acres for small game.

Initiates agreements with Quail Forever to provide partial funding for seven cooperative biologist positions to help focus Department efforts on quail.

Assists the U.S. Department of Agriculture with developing and applying \$150 million in Farm Bill conservation programs.

Delivers funds provided via the U.S. Fish and Wildlife Service Landowner Incentive Program grant to implement 103 landowner projects, which improve grassland habitat on more than 3,800 acres within Grassland Conservation Opportunity Areas.

Helps private landowners to achieve long-term natural resource conservation objectives by providing service through 31,400 rural and urban landowner contacts that benefit 280,155 acres; provides habitat management workshops to 40,486 attendees; assists the U.S. Department of Agriculture with enrolling 90,000 acres of cropland reflooding in the Migratory Bird Habitat Initiative; and assists 5,607 private landowners in controlling nuisance wildlife.

The Managed Deer Hunt program coordinates 95 managed hunts. 5,914 hunters participate and harvest 1,646 deer.

Through the Share the Harvest program, 5,731 deer hunters donate 305,643 pounds of venison.

More than 1,800 volunteer instructors, and Department staff, conduct 877 Hunter Education courses and certify 22,852 students.

Interest in the Tree Resource Improvement and Maintenance cost-share program is strong as Missouri towns experience numerous severe weather events. This year, the Department spends \$206,386 funding 31 grants. Applicants match the Department contribution by 48 percent providing \$194,059 in local match.

Provides stream and lake management assistance to 5,679 private landowners.

Distributes about 3.5 million seedlings for planting to 9,600 landowners.

## ADMINISTRATION

Chris Vitello is promoted from fisheries field operations chief to Fisheries Division chief on July 1, 2010.

Mike Kruse is promoted from research science center chief to Resource Science Division chief on July 1, 2010.

Mike Huffman is promoted from forest management chief to Outreach and Education Division chief on July 16, 2010.

Jacob Careaga is promoted from design and development chief to Design and Development Division chief on July 1, 2010.

Mike Hubbard is promoted from resource science field chief to Private Land Services Division chief on July 1, 2010.

On Oct. 15, 2010 the Commission approves the proposed elk-restoration plan, which calls for releasing up to 150 elk into a 346-square-mile area of Shannon, Carter, and Reynolds counties early in 2011. All released elk will undergo stringent health testing and quarantines and will be fitted with radio collars.

Blue catfish sampling and tagging continues at both Lake of the Ozarks and Truman Reservoir, to determine the population structure and growth rates of blue catfish.

Confirms the fish barrier net at Lake of the Ozarks is effective, reducing target fish passage by 93 percent and non-target fish passage by 47 percent.

Maintains a high level of active management on Department lands—especially for quail and grassland birds. Conducts habitat management activities on nearly 185,000 acres of public land including 43,000 acres of wetland; 21,000 acres of woodland, forest, and savanna; 76,000 acres of cropland; 24,000 acres of grassland and prairie; 20,000 acres of old fields; and 1,000 acres of glade.

More than 114,000 participants take part in 2,030 Department programs on hunting, fishing, trapping, and shooting sports.

More than 130,000 people attend programs or practice firearms and archery shooting at the Department's five staffed shooting ranges and 75 unmanned shooting ranges.

Manages 944 impoundments and stream areas for public fishing.

In 2008, anticipating a decline in revenues due to the downturn in the economy, the Department implemented a vacancy management plan to identify positions that would not be filled as they became vacant. By June 2011, the vacancy management plan has been fully implemented and 174 positions are vacated and held open, resulting in a savings of more than \$10 million.

Designates LaBarque Creek Conservation Area in Jefferson County and 240 acres of Burnt Mill Cave Conservation Area in Camden County as Missouri natural areas.

Completes the following major construction projects: Eminence City Park access; Eagle Bluffs Conservation Area (CA) office and draw room; regional office storage at Charles W. Green CA; Kansas City Regional Office; Shepherd of the Hills Fish Hatchery sewage lift station; Lost Valley Fish Hatchery rearing pond under drain system; Lost Valley Fish Hatchery roof; Powder Valley Conservation Nature Center HVAC; Jay Henges Shooting Range renovation; Roaring Rivers Fish Hatchery building improvements; and Ten Mile Pond CA levee relocation around Blew Hole.

Contracts for the construction of the Blind Pony Lake Conservation Area Hatchery production pond renovation Phase 3 project in Saline County; Lost Valley Fish Hatchery roof replacement project in Benton County; Duck Creek Conservation Area Golden Anniversary wetland structures in Wayne, Bollinger, and Stoddard counties; Eminence City Park access development project in Shannon County; new





**Administration:** The Department, in cooperation with Mississippi State University and with funding from the Federal Aid in Wildlife Restoration Act, begins the first black bear research project in Missouri. Captures a total of 13 black bears and fits them with GPS radio collars across the southwest portion of the state. The average weight of adult male bears is 321 pounds. The average weight of adult female bears is 185 pounds.

Sullivan-area workstation on the Meramec Conservation Area in Franklin County; monitoring system at the Roaring River Fish Hatchery in Barry County; Burr Oak Woods Conservation Nature Center Phase I exhibit renovation in Jackson County; and Central Office K building roof replacement project in Cole County.

Reports *Xplor* magazine now has 64,267 subscribers.

Additional copies to schools and other outlets increase the total distribution to 80,000 per issue.

Publishes the book *Discover Missouri Natural Areas*, a 140-page guide to 50 of the best examples of our state's natural heritage. Written by Mike Leahy, the Department's natural areas coordinator.

Publishes the book *Cooking Wild in Missouri*. A 200-page collection of more than 100 recipes highlighting Missouri's game, fish, nuts, fruits, and mushrooms. Written by Bernadette Dryden, retired Department publications coordinator.

Purchases or receives donations of 408 acres, including a 161-acre addition to the W.R. Kearn Memorial Conservation Area.

## MILESTONES AND NOTABLE EVENTS

Social media plays an increasing role in sharing Department information with Missourians. MDC's Facebook page reaches almost 1.5 million people per month from more

than 33,000 fans who then share information with thousands of online friends. MDC's Twitter feed has more than 1,600 followers who then pass tweets along to thousands more. MDC's YouTube videos average about 140,000 views per month with more than 5 million total views. MDC's online photos through Flickr offer about 1,500 images, which have had more than 25,000 views.

In *Turner and Jones v. Missouri Department of Conservation*, the Missouri Court of Appeals, Southern District, rules that the plaintiffs, who challenged a *Wildlife Code* regulation prohibiting deer hunting with the aid of dogs, a practice sometimes referred to as "deer dogging," failed to prove that the regulation was unconstitutionally void for vagueness. The Court points out that wildlife hunting is limited to the extent permitted by rules and regulations made by the Conservation Commission.

The nine communities in the Redings Mill Fire Protection District are the first in Missouri to be recognized as Firewise Communities, which promote the use of technology, policy, and practices to minimize the loss of life and property to wildfire, independent of firefighting.

On May 8, 2009, a severe storm impacts the southern half of Missouri. On Department lands, approximately 13,000 acres are impacted and damaged—timber volume is estimated at 33 million board feet. Eleven sales are contracted covering 811 acres, salvaging 31.9 million board feet, bringing in \$1.9 million in revenue.

## CONSERVATION COMMISSION

**Don R. Johnson, *chairman*****Don C. Bedell, *vice chairman*****Becky L. Plattner, *secretary*****James T. Blair, IV, *member***

## CONSERVATION BY THE NUMBERS

## FISCAL YEAR 2012 SUMMARY

## RECEIPTS

Conservation Sales Tax .....	\$100,566,000
Permit Sales .....	\$32,850,045
Federal Reimbursements .....	\$25,141,633
Sales and Rentals .....	\$7,480,667
Interest .....	\$308,776
Other Sources .....	\$3,320,018
<b>Total Receipts .....</b>	<b>\$169,667,139</b>

## DISBURSEMENTS

Fisheries .....	\$12,716,375
Forestry .....	\$16,099,331
Wildlife .....	\$18,219,592
Protection .....	\$14,466,452
Outreach and Education .....	\$15,335,558
Private Land Services .....	\$7,259,198
Resource Science .....	\$10,935,086
Administration .....	\$1,620,110
Administrative Services .....	\$13,399,551
Human Resources .....	\$2,499,008
Information Management and Technology .....	\$11,156,936
Design and Development .....	\$10,933,780
Regional Public Contact Offices .....	\$2,720,688
County Assistance Payments .....	\$1,476,267
Capital Improvements .....	\$18,030,635
Department-wide Replacement Vehicles ...	\$6,041,458
<b>Total Disbursements .....</b>	<b>\$162,910,025</b>

*No money from the state's general revenue goes to MDC.*

## NOTABLE WILDLIFE CODE CHANGES

## Fishing:

Bans the use of porous-soled waders or footwear when fishing in trout parks and certain trout waters to reduce the risk of spreading the invasive alga known as didymo.

## Hunting and Trapping:

Rescinds the Resident Fur Handlers Permit on July 1, 2011.

On and after this date, hunters and trappers with valid permits that allow the taking of furbearers may possess, transport, and sell furs throughout the year, to allow trappers and hunters more opportunities to sell their furs at national and international auctions.

Extends hunting and fishing permit exemptions to include members of the U.S. military currently assigned as patients to a Warrior Transition Brigade, Warrior Transition Unit, or a military medical center; and allows them to purchase resident turkey and deer permits regardless of where they live.

Beginning with the 2012 frog season, bullfrogs and green frogs may be taken on conservation areas using crossbows, pellet guns, and .22-caliber or smaller rimfire rifles or pistols.

Extends dove hunting from half-day to all-day at 10 conservation areas.

Renames the muzzleloader portion of the fall firearms deer season the alternative methods portion to reflect additional method options added this past season: archery methods, crossbows, atlatls, handguns firing expanding-type centerfire ammunition, and air-powered guns, .40-caliber or larger, that are charged only from an external high-compression power source.

Restricts activities that are likely to unnaturally concentrate deer and promote the spread of chronic wasting disease.

Adds managed deer hunting permits to the list of reduced-price deer and turkey permits for youths.

Exempts individuals with autism and certain other disabilities that prevent them from passing the Hunter Education certification test from hunter-education requirements, on a case-by-case basis after applicants have taken the Hunter Education course and tested twice, failing both times. A hunter education certified adult must accompany individuals hunting under this exemption.

## General:

Prohibits the public from planting seeds on conservation areas to reduce the risk of introducing exotic plants.

Adds elk and mule deer to the list of wildlife that landowners may not kill to protect property without permission from a Department agent.



## PROGRAMS AND PARTNERSHIPS

Quick Draw pilot continues for another year at Eagle Bluffs, Grand Pass, and Otter Slough to continue evaluating the program's effectiveness.

The Department, in partnership with the St. Louis Zoo, is raising more than 1,500 larva and juvenile Ozark hellbenders; Shepherd of the Hills Hatchery is raising more than 700 larval eastern hellbenders.

Reports 45 bears have been captured and tagged, as part of the ongoing Missouri black bear research project.

Improves habitat at Table Rock Lake through the National Fish Habitat Partnership including the installation of 1,836 brush structures, 104 rock piles, 76 stump fields, 11 combination rock and stump structures, and 26 shallow-water rock fence structures. Staff also install 71 boulder structures on Lake Taneycomo to improve fish habitat.

In partnership with Ameren Missouri and the World Bird Sanctuary, provides a live webcam of peregrine falcons raising five chicks in a nesting box at Ameren's Sioux Energy Center in Franklin County.

Stream Team program expands to 4,466 teams (85 percent still active) statewide. Volunteers remove more than 459 tons of trash, plant 5,254 trees, and host 1,228 events.

The Stream Team Watershed Coalition completes *The State of Missouri's Streams: Summary of Invertebrate Data, 1993–2010*, to analyze and interpret Stream Team volunteer data.

The Managed Deer Hunt program coordinates 97 managed hunts. 6,158 hunters participate and harvest 1,784 deer.

Through the Share the Harvest program, 6,191 hunters donate 317,882 pounds of venison. Hunters who donate their entire deer receive \$60 to reduce processing costs paid by the Conservation Federation of Missouri.

The Stream Stewardship Trust Fund awards grants of \$763,896 to seven Department projects to protect Missouri's stream and riparian corridors. The Missouri Conservation Heritage Foundation administers the program and funds.

Develops 24 invasive species fact sheets to help identify and offer management solutions to landowners.

Enters into agreements with 117 partners for the cooperative management of 168 public lakes, 42 stream-access areas, four lake-access areas, and 10 aquatic education ponds.

Manages more than 51 urban lakes for fishing, stocking 127,520 keeper-sized fish in these lakes.

Grows and distributes about 3 million seedlings of more than 60 species.

Completes installation of woody biomass boiler systems at six schools as part of the Missouri Fuels for Schools program. Funding is provided by a \$6 million American Recovery and Reinvestment Act grant.

The Call Before You Cut program provides assistance to more than 1,000 landowners.



**Programs and Partnerships:** Installs wader wash stations at Missouri's four trout parks and Shepherd of the Hills Hatchery to help stop the spread of didymo, an invasive alga.

Receives a \$100,000 grant from the U.S. Forest Service to create a community forestry recovery coordinator position assigned to help Joplin and Duquesne recover from tornado damage.

Helps form the Forest and Woodland Association of Missouri to assist Missouri's 359,000 woodland landowners, who own 83 percent of the state's woodland resources, with a wide variety of forest management resources.

Completes the second cutting cycle on the Missouri Ozark Forest Ecosystem Project, a cooperative 100-year study to discover the best ways to sustain forests while providing habitat for native plants, birds, insects, reptiles, and other wildlife. The project involves the application of uneven-aged management, even-aged management, and non-manipulative (no-cut) forest management on Department land in Carter, Shannon, and Reynolds counties.



**Administration:** As part of the Golden Anniversary Wetlands Initiative, continues to rehabilitate five of the Department's oldest wetland management areas: Ted Shanks, Montrose, Fountain Grove, Schell-Osage, and Duck Creek conservation areas.

Missouri Forestkeepers Network now has 2,600 members who donate more than 20,300 hours this year.

Approves the funding of Ozark Regional Land Trust's acquisition of a perpetual conservation easement on approximately 415 acres in Lawrence County, with the Department being reimbursed for 100 percent of its costs from a U.S. Fish and Wildlife Service grant.

Hosts the 27th annual International Hunter Education Association (IHEA) conference in Kansas City, which celebrates IHEA's 40th anniversary. It is IHEA's highest rated conference.

For their 10th anniversary, Missouri River Relief, Stream Team number 1875, conducts a cross-state Missouri River clean-up with the Department and 1,473 volunteers, filling a barge with 60 tons of trash and educating hundreds of students on the importance of this vital water resource.

The Department and Ducks Unlimited host four 75th Anniversary Celebration and Wetlands Fun Days to recognize progress on their shared mission of conserving migratory birds and other wetland-dependent wildlife.

## ADMINISTRATION

Initiates revisions of the Missouri Comprehensive Wildlife Strategy.

The Department's Statewide Shooting Range Program, in its 40th year, now includes five staffed range complexes, 62 conservation areas with ranges, and 12 cooperative ranges to aid in hunter recruitment, hunter proficiency, public accessibility, and safe shooting.

Initiates a pilot study to monitor quail habitat use, movement, and population response related to various habitat management practices in southwest Missouri.

Continues efforts to reduce urban deer conflicts with more than 40 municipalities or entities.

Contracts for construction for the Duck Creek Conservation Area Golden Anniversary Unit A & Unit B renovation project in Wayne County; Lost Valley Fish Hatchery paddlewheel aerators for fish production ponds project in Benton County; Hamburg Ferry Access pavement replacement project in Pike County; Bennett Spring Fish Hatchery raceway renovations project in



Laclede County; Blind Pony Lake Conservation Area renovation of hatchery production ponds Phase 4 project in Saline County; and Lost Valley Fish Hatchery ambient pond renovation project in Benton County.

Completes the 4,000 square-foot early rearing production facility at Bennett Spring Hatchery.

In March 2012, opens the new Central Regional Office and Conservation Research Center in Columbia. The 28,500 square-foot, \$6 million facility houses 120 employees formerly housed at two facilities.

Designates new natural areas: 398-acre Fern Nook Natural Area on Little Black Conservation Area in Ripley County; 13-acre Great Spirit Cave Natural Area in Pulaski County; and 1,280-acre Western Star Flatwoods Natural Area on the Mark Twain National Forest in Phelps County.

To date, Missouri has recorded 1,000 easements covering 139,815 acres through the Wetland Reserve Program. The majority of these are permanent.

The Mountain Lion Response Team confirms 12 mountain lion sightings this year.

Anglers purchase 1,333,753 resident and nonresident fishing permits and tags of all types (including daily fishing permits, daily trout tags, and the sale of all annual fishing permits).

Graduates 13 new conservation agents from the Conservation Agent Training Academy to fill vacant positions.

Purchases or receives donations of 767 acres, including 428-acre Myron and Sonya Glassberg Family Conservation Area in Jefferson County.

## MILESTONES AND NOTABLE EVENTS

July 2 is the 75th anniversary of the Conservation Commission's first meeting.

Celebrates 75 years of Missouri's unique, citizen-led conservation. The celebration includes a half-hour TV program, special events, publications, and a 12-part series of articles in the *Missouri Conservationist*.

*Missouri Conservationist* and *Xplor* magazines both score wins in a national competition sponsored by the Association for Conservation Information. In all, the Department wins 19 awards—more than any other state.

*Xplor* magazine, the Department's free bimonthly magazine, now has 125,003 Missouri subscribers, 3,272 out-of-state subscribers, and 48 international subscribers. With additional copies reaching schools and other outlets, the total circulation is 176,193 copies per issue.

This year's breeding ground survey estimate of 48.6 million ducks is 43 percent above the long-term average and the highest since surveys began in 1955.

Successfully spawns lake sturgeon in a lab—the first time lake sturgeon have been spawned outside of the wild in Missouri.



**Milestones and Notable Events:** After a tornado tears through Joplin, the Department worked on disaster response, evaluated remaining trees, and then funded and coordinated the planting of more than 20,000 trees.

Chronic wasting disease (CWD) is discovered for the first time in free-ranging deer populations in Missouri. Five CWD-positive deer are identified in Macon County. With the help of hunters, the Department has tested more than 35,000 free-ranging deer for CWD from all parts of the state since 2002.

White-nose syndrome (WNS) is confirmed in three bats from two caves in Lincoln County in March 2012.

In the fall of 2011, a Missouri resident harvests a deer using the atlatl—a first in modern times.

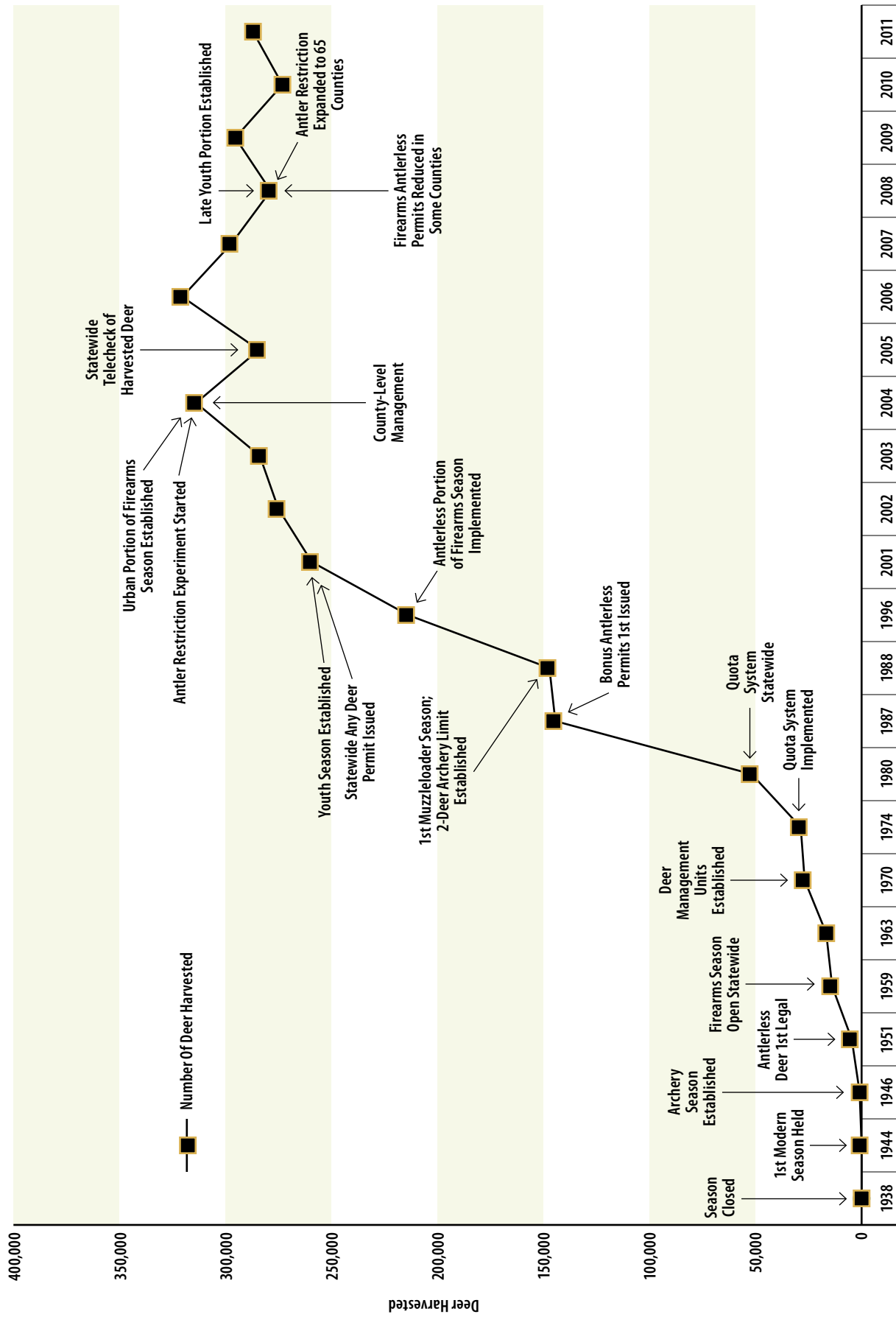
As the latest success in an ongoing Department partnership, the world's first captive breeding of the Ozark hellbender occurs at the St. Louis Zoo, in the fall of 2011. About 150 Ozark hellbenders are hatched.

For the 10th consecutive year, Kids' Fishing Day is held at the four trout parks.

Rockwoods Reservation celebrates its 75th anniversary.

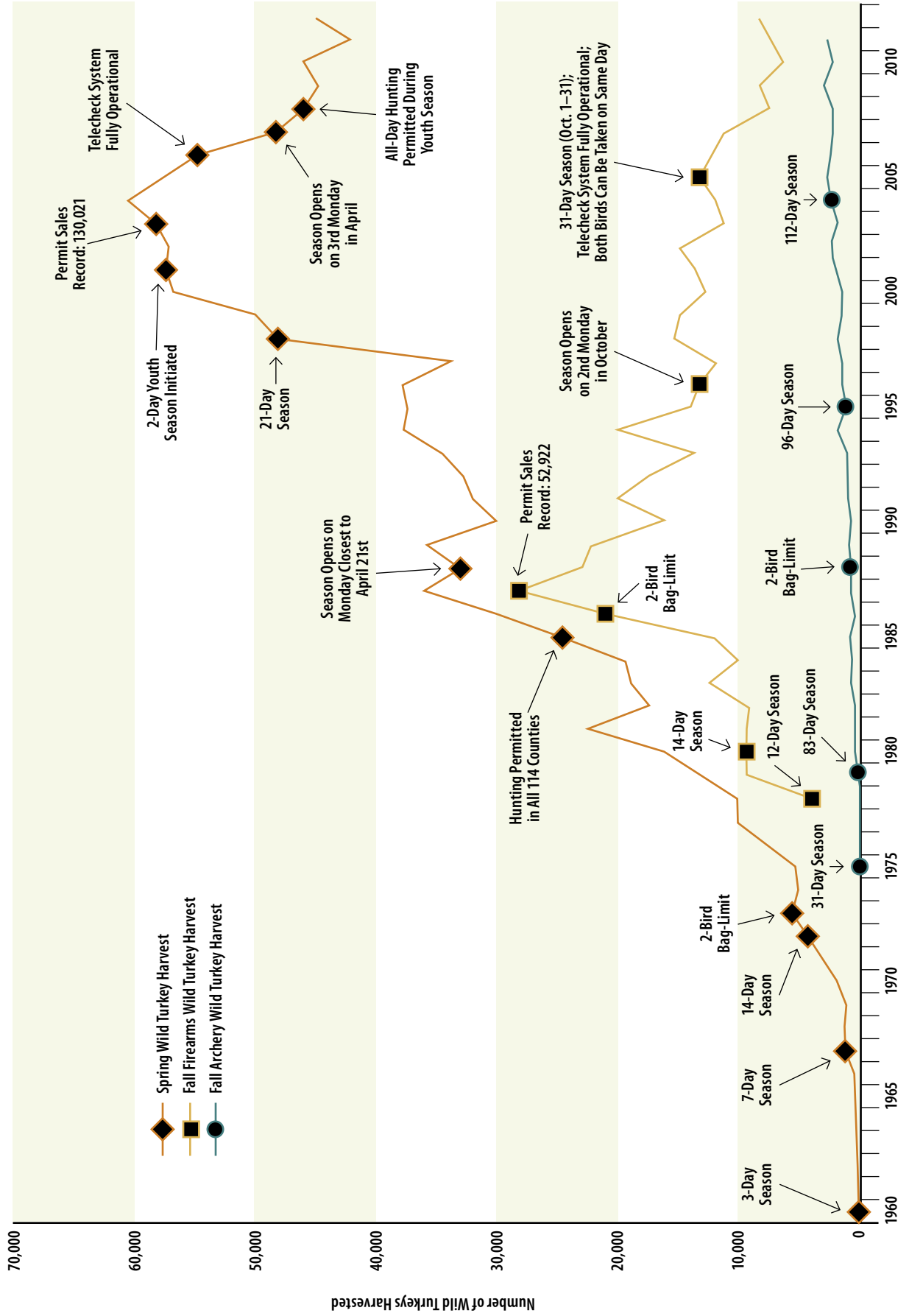
It was the first conservation area purchased by the Conservation Commission, on June 27, 1938.

# White-tailed Deer Regulations Changes and Harvest Totals in Missouri





# Spring and Fall Wild Turkey Harvest in Missouri



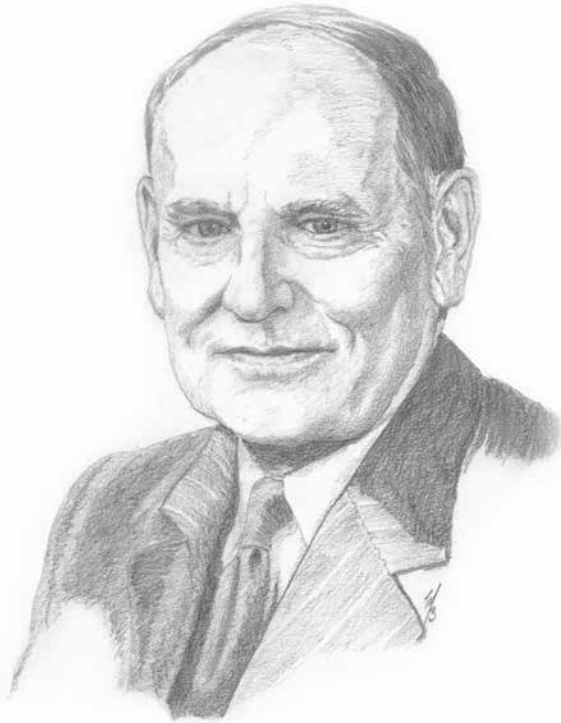




# Profiles of Conservation Leaders



The following pages include profiles of the Department's directors, conservation commissioners inducted from 1987 through 2012, recipients of the Master Conservationist Award from 1987 through 2012, and Conservation Hall of Fame inductees. For more information on the Department's early directors, conservation commissioners from 1937 through 1986, and earlier recipients of the Master Conservationist Award, refer to Keefe's *The First 50 Years*.



The Department's director is hired by an unpaid Conservation Commission, rather than being appointed by the governor. This provision affords the Department a great amount of stability and permanence. Over the past 75 years, the Department has had only eight directors. The current director is Robert L. Ziehmer. To learn more about the Department's early directors, see Keefe's *The First 50 Years*.

### Irwin T. Bode

First Department Director 1937–1956

I.T. Bode became the first and longest-tenured director of MDC, replacing interim director Frank Ramsey in November 1937. Bode was a native of Keokuk, Iowa, a graduate of Iowa State College and a veteran of the U.S. Army in World War I. Before coming to Missouri, he was already well-known for his organizational successes as the first extension forester at Iowa State College, the first director of Iowa's state conservation agency, and as the first head of cooperative wildlife research for the U.S. Department of Agriculture in Washington, D.C.

Bode consulted frequently with E. Sydney Stephens as the new Department developed. Together they fashioned the Department, developed its initial programs, and the philosophical base upon which it still rests. They mutually fought for it in those early years of turmoil, and held it together during the lean years of World War II. It is said that Syd Stephens may have had the dream, but it was I.T. Bode who made it a reality.

Bode espoused the now-familiar ideals of keeping the Department free from political influence, basing wildlife regulations on scientific research, and hiring well-qualified employees. He created Information Services as one of his three main divisions to educate Missourians about conservation principles. He also realized that it would be necessary for his employees to work with individual landowners to restore wildlife and forestry resources.

Bode was respected nationwide by colleagues in conservation and served as president of the prestigious International Association of Fish and Wildlife Agencies.

Bode remained director through the World War II years and retired Dec. 1, 1956. He passed away Nov. 5, 1970, in Whittier, Calif. For more information about Bode, see Keefe's *The First 50 Years*.



## William E. Towell

Second Department Director, 1957–1966

Director Towell was from St. James, Mo., and a forestry graduate of the University of Michigan. He interviewed to become the first Missouri state forester in 1938, but he was judged too young and instead became the first district forester of the Meramec Fire District at Sullivan. In 1941, he became the second farm forester at Kirksville. He served as a Naval officer in the Pacific during World War II before moving to the Department's central office, where he was promoted to assistant state forester in charge of fire control on George White's forestry staff. In April 1956, he became an assistant to the director. After Director Bode's retirement, Towell served as acting director for six months. The Conservation Commission then named him to director after a lengthy, nationwide search.

One of Towell's major accomplishments was to unite all Department administrative staff into one building. They had been housed in three separate Jefferson City offices until 1958. In August 1965, the Department's central office was moved to its current site on West Truman Boulevard in Jefferson City. Towell also restructured the Department to create separate fish and game divisions, as well as Personnel, Operations, and Planning sections. During his tenure, the Department also opened offices in Kansas City and St. Louis.

In 1967, he left the Department to become executive vice president of the American Forestry Association in Washington, D.C., and held the same position with the Society of American Foresters until 1984. In the late 1970s, he moved to Southern Pines, N.C., where he passed away in May 2004. For more information about Towell, see Keefe's *The First 50 Years*.





### Carl R. Noren

Third Department Director, 1967–1979

Under the direction of Carl Noren, the Department obtained increased funding for expansion of conservation programs in Missouri. A native of Rhode Island, he graduated from the University of Missouri with a master's degree in biology in 1941, after working with the Department for one year. He entered military service in 1941 and then returned to the Department in 1946. He became a liaison to the U.S. Army Corps of Engineers and other agencies involved with planning large reservoirs in Missouri. He was assigned to the Planning Section in 1964 prior to becoming director Jan. 1, 1967.

A 1971 long-range plan called Design for Conservation proposed to broaden the responsibilities of the Department to include management of non-game wildlife and increased use of Department lands by all Missourians. However, a new source of funding was needed to make this possible. Noren worked with the Conservation Federation of Missouri and the Citizens Committee for Conservation to pass a constitutional amendment in 1976 authorizing a one-eighth of 1 percent sales tax—which remains the primary source of funding for the Department today.

During Noren's administration, the Conservation Commission adopted a policy of stream preservation over construction of large reservoirs in the Ozarks. The urban fishing program began in St. Louis in 1969. A new Research Center was constructed in Columbia in 1970. To help implement the Design for Conservation, Noren created the Natural History Section and the Land Acquisition Unit in 1976. For his many contributions to conservation in Missouri and the nation, he was presented with the American Motors Conservation Award in 1978.

Noren retired in 1979 and moved to Georgia but later returned to Columbia, where he passed away in 2002. For more information about Noren, see Keefe's *The First 50 Years*.



## Larry R. Gale

Fourth Department Director 1979–1988

Director Gale oversaw an expansion of Department programs to implement the Design for Conservation. A native Ohioan, he graduated from the University of Ohio in 1942. In that same year, he enlisted in the U.S. Marine Corps, then served in the South Pacific during World War II. He returned to the University of Ohio after the war, earning a master's degree in wildlife in 1947. He then became a biologist with the Kentucky Department of Fish and Wildlife, where he served as game director from 1949 to 1956.

His first job with the Department was chief of the Fish and Game Division in 1957, where he began the new turkey restoration program, among other duties. He was promoted to assistant director to Director Towell in 1964, deputy director to Director Noren in 1967, and then became director in 1979.

Acquisition of new conservation lands was one of the Department's main priorities under Director Gale. By the end of his administration, however, a shift toward development had begun. The first conservation nature center at Burr Oak Woods opened in 1983. A major political challenge for Gale and the Conservation Commission involved ongoing efforts by the legislature to use Department funding for state parks. The problem was resolved in 1984 with passage of a new tax for parks and soil conservation. Other controversial issues involved the first required use of steel shot for waterfowl hunting in designated areas and ongoing fish kills at Truman Dam at Warsaw.

After Director Gale's retirement in 1988, he remained in Jefferson City and enjoyed hunting and fishing until his death in 1990. For more information about Gale, see Keefe's *The First 50 Years*.





### Jerry J. Presley

Fifth Department Director, 1988–1997

Director Presley guided the Department after the Design for Conservation period. He was born in St. Louis and raised in Shannon County. After serving four years in the U.S. Navy during the Korean conflict, Presley graduated from the University of Missouri with a degree in forest management in 1958.

Presley began his 39-year career with the Department when he was hired as an assistant district forester at Ellington. He was then promoted to district forester at three successive locations. He was appointed state forestland supervisor in 1964, assistant state forester in 1969, and state forester (Forestry Division chief) in 1977. He was promoted to assistant director in 1986 and was named director in 1988.

The first long-range strategic planning for the Department was carried out during Presley's administration, with an emphasis on development and management of 260,000 acres of land acquired under the Design for Conservation. Construction projects included nature centers in St. Louis, Springfield, and Jefferson City, and offices in Cape Girardeau, St. Louis, Springfield, St. Joseph, and Camdenton. Shooting ranges were built at Forest 44 and Bois D'Arc wildlife areas. Area plans were created for all major Department lands, which became known as conservation areas. Working partnerships were developed with public, private, and volunteer groups. The concepts of ecosystem management, biodiversity, and sustained use gained broader acceptance.

After his retirement from the Department in 1997, Presley served as president of the International Association of Fish and Wildlife Agencies, became a consultant for the U.S. Fish and Wildlife Service and for the State of New Jersey, and served as director for the Wonders of Wildlife Museum in Springfield during its creation.



## Jerry M. Conley

Sixth Department Director, 1997–2002

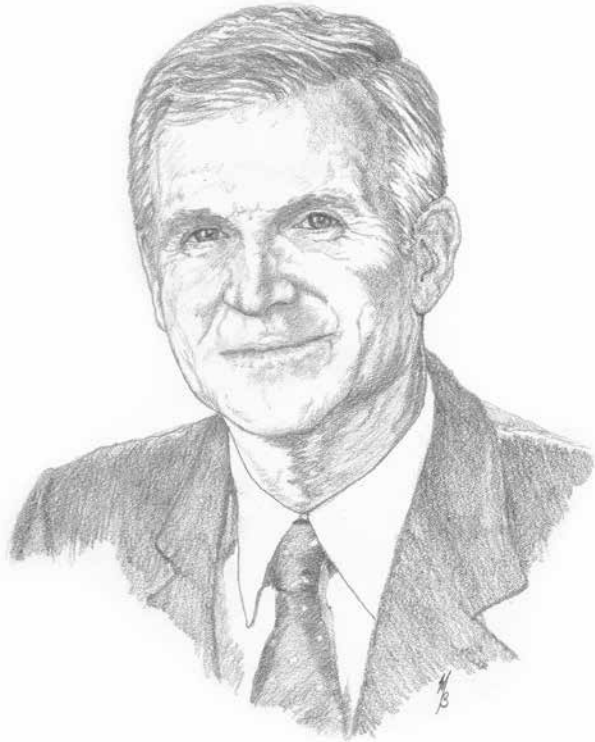
Jerry Conley was the first director to be selected from outside the Department since I.T. Bode. A native of Cape Girardeau, he earned a degree in fisheries management from the University of Missouri in 1964 and a master's degree in 1966. After graduation, he took a job with the Utah Division of Wildlife Resources, becoming regional fisheries manager in 1967. He was employed with the Iowa Conservation Department in 1969 and became state fisheries superintendent in 1971. In 1977, he became director of the Kansas Department of Wildlife and Parks before serving as director of the Idaho Department of Fish and Game for the next 16 years. He became the Missouri Department of Conservation's sixth director in 1997.

Conley's administration was relatively brief—it lasted five and a half years—but in that short time he reorganized the agency, putting in place a foundation to allow the agency to better respond to public needs. Change became the hallmark of the Department under the Conley administration.

Some of the many changes that took place during Conley's administration included the creation of 10 regions with boundaries common to all divisions. Regional Coordination Teams were established. In the central office, he appointed one deputy director to supervise all divisions. A new Private Land Services Unit was established in 1998, to allow staff to work one-on-one with landowners. It was upgraded to divisional status in 1999. Major Department facilities that opened during his administration included the Lost Valley Hatchery and the Ozark regional office.

After retiring in 2002, Conley and his wife, Janet, returned to Idaho to be closer to family. Conley passed away October 5, 2012.





### John D. Hoskins

Seventh Department Director, 2002–2009

John Hoskins, a native of Carter County, became director on July 1, 2002. Hoskins graduated magna cum laude from Southeast Missouri State University in 1975 with a B.S. in education, emphasis in biology. In 2000, he completed his Master of Public Administration degree at the University of Missouri.

Hoskins began his 32-year career with the Department in 1977. His career included service in three regions and two divisions (Protection and Administrative Services).

As director, Hoskins focused on improving the Department's public image, making services and programs available and relevant to as many people as possible. This effort demanded careful fiscal management, nearly constant public meetings, and improved outreach, especially in digital media.

Hoskins consolidated administrative divisions, lowering Department overhead by about \$2.1 million annually. His administration weathered many outside audits and prevailed against legal threats to the Department's authority, winning millions for conservation in court.

Extensive public meetings resulted in a simplified deer-management strategy, cheap antlerless deer permits available where population control was needed, and the four-point antler rule where Missourians wanted better-quality deer hunting.

Under Hoskins' tenure, the Department improved its digital media outreach. The online Telecheck system, in particular, allows the Department to collect harvest data more cheaply for both staff and hunters.

Hoskins led the Department to open new conservation education facilities in Kansas City, Cape Girardeau, St. Louis, Winona, Joplin, and St. Joseph; improve fish hatcheries, shooting ranges, stream accesses, and other facilities; improve thousands of acres of habitat for quail and other wildlife; and revise management practices for timber harvest on conservation lands to ensure forest sustainability.

After retiring from the Department, Hoskins and his wife, Janet, moved to their Carter County farm.



## Robert L. Ziehmer

Eighth Department Director, 2010–

Robert Ziehmer assumed the director's duties on Jan. 15, 2010. He was born and raised in California, Mo., where he resides with his wife and daughters. Ziehmer earned a Bachelor of Science in fisheries and wildlife in 1989 and completed a Master of Science in wildlife in 1993 at the University of Missouri–Columbia.

Ziehmer began his Department career with seasonal positions starting in 1987. In 1991, he was hired as an Assistant Biologist working in the Fisheries Division. In 1996, he was assigned to the Planning Section. He was promoted to assistant to director–governmental relations in 2002, assistant director in 2006, and director in 2010.

As the Department's eighth director, Ziehmer believes that citizen input and involvement are critical to conservation. One of his top priorities is maintaining the citizen confidence and support that have made Missouri a national conservation leader.

Under his leadership, the Department's priorities for all operational areas include increasing communication and education, boldly advancing research and management, increasing citizen input and partnerships, and growing quality staff.

Milestones during Ziehmer's time as director include restoration activities for elk, prairie chickens, hellbenders, and sturgeon; active efforts to deliver the conservation message in all public schools; implementation of major infrastructure projects, including hatchery renovations, Golden Anniversary Wetlands Initiatives, shooting range renovations, and facility energy management; developing clear priorities for Regulations, Realty, and Capital Improvements/Technology committees; working to improve the agency's business practices and processes; fully implementing the plan for reducing staffing levels by more than 11 percent; and continuing the Department's role as a national leader in forest, fish, and wildlife management.

Ziehmer serves on a variety of conservation-related boards and committees at both state and national levels. In 2011, he was named as one of Bass Pro's Conservation Partners of the Year.



## Commissioners

The Missouri Conservation Commission is composed of four members appointed by the governor and approved by the state senate. The Commission controls, manages, restores, conserves, and regulates the bird, fish, game, forestry, and all wildlife resources of the state, including hatcheries, sanctuaries, refuges, reservations, and all other property owned, acquired, or used for such purposes. It also acquires and establishes those properties. In addition, it appoints the director of the Department, approves *Wildlife Code of Missouri* regulations, develops the budget, and makes decisions concerning major expenditures. Commissioners who served from 1937 through 1986 are listed in Keefe's *The First 50 Years*.



### John R. Powell (R)

Rolla, 1985–1997 (reappointed in 1991)

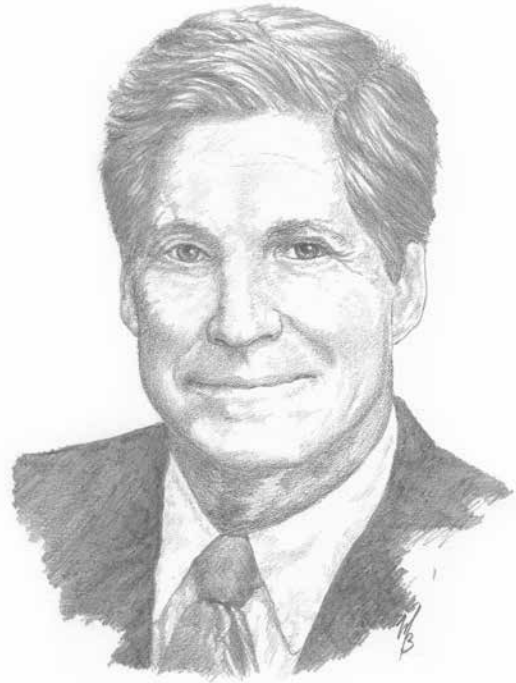
John Powell served in World War II as a cadet midshipman in the U.S. Merchant Marine Academy–U.S. Naval Reserve from 1944–1945. In business, he became president and co-owner of Powell's Lumber and Home Center in Rolla. He also supervised an 18,000-acre tree farm and was founder and first president of the Missouri Forest Products Association. The Conservation Federation of Missouri named him Forest Conservationist of the Year in 1968. He was involved in many local community organizations, including the Rolla Chamber of Commerce and Rolla Lions Club. Powell was also very active in many state and national organizations including the Missouri State Republican Committee, serving as chairman from 1980–1983. He was the recipient of numerous civic, political, and conservation awards, and he was a 50-year member of the American Tree Farm System.



## Jay G. Henges (R)

Chesterfield, 1987–1993

Jay Henges was a St. Louis manufacturer and an active outdoorsman who learned to shoot a shotgun at clay birds off the stern of a World War II warship. He started hunting when he left the service and is an ardent quail and waterfowl hunter, and with his wife, Carolyn, a dedicated angler. He was a prime mover in acquiring the Department's Forest 44 Conservation Area outside of St. Louis and its state-of-the-art shooting range, which bears his name. He serves on the St. Louis Zoological Park Subdistrict Commission and is a past trustee of the St. Louis Science Center. Henges owned Henges Interiors and Porta-King Building Systems, both headquartered in Earth City, St. Louis County.



## Jerry P. Combs (D)

Kennett, 1989–1995

Jerry Combs, a 1964 graduate of the University of Missouri–Columbia, is president of several enterprises in Kennett, Mo., including Baker Implement Company; J.P.C. Farms, Inc.; and Combs Realty Co., among others. He is a waterfowl hunter and has been active in conservation and community leadership throughout his life. He currently serves on the University of Missouri School of Natural Resources Advisory Board, is a past board member of the Greater St. Louis Area Council of the Boy Scouts of America and past president of the Kennett Chamber of Commerce. The Jerry P. Combs Lake in southeast Missouri is named for him.



## Commissioners



### William A. R. "Andy" Dalton (D)

Springfield, 1989–1995

Andy Dalton—the senior managing partner in the law firm of Daniel, Clampett, Lilley, Dalton, Powell & Cunningham of Springfield—is from a Missouri family steeped in public service. His father, S.P. Dalton, was on the state Supreme Court for 26 years, and his uncle, John, was governor. Dalton is chairman of the Missouri Environmental Improvement and Energy Resources Authority. He is active in hunting, fishing, and other outdoor activities. The Andy Dalton Shooting Range and Training Center at Bois D'Arc Conservation Area is named for him.



### Anita B. Gorman (R)

Kansas City, 1993–2005

Anita Gorman was the first woman named to the Conservation Commission. She has been a trustee of the National Recreation and Parks Association, a board officer of Blue Cross and Blue Shield of Kansas City, a board member of Commerce Bank, and a member of the Greater Kansas City Chamber of Commerce, and other civic organizations. In 1979, she became the first woman to serve on the Kansas City Board of Parks and Recreation Commission, and in 1988 she became that board's president, a position she held until her departure in 1991.

Gorman chaired the fundraising activity that matched the Department's commitment to fund half the cost of the Discovery Center in Kansas City. That facility was later named the Anita B. Gorman Conservation Discovery Center. Gorman also helped start the Missouri Conservation Heritage Foundation, and she was instrumental in the Department's acquisition of the 4,000-acre Columbia Bottom Conservation Area at the confluence of the Missouri and Mississippi rivers.



## William R. “Randy” Herzog (I)

St. Joseph, 1995–2001

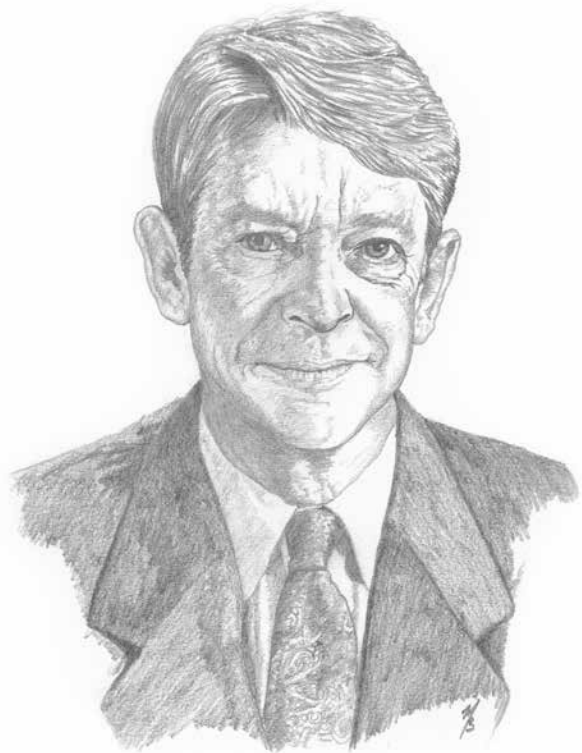
Randy Herzog is vice president of Herzog Contracting Corporation in St. Joseph. He co-manages a 200-acre private hunting club in Mound City and a 200-acre farm in DeKalb County. He is a member of Ducks Unlimited, the National Rifle Association, and the Conservation Federation of Missouri. He holds a Bachelor of Science degree in business administration from the University of Missouri–Columbia. His interest in conservation began as a youth through hunting and fishing. A wetland unit in Nodaway Valley Conservation Area was named for him in 2004.



## Ronald J. Stites (D)

Plattsburg, 1995–2001

Ron Stites is an attorney with an office in Kansas City, Mo. He is or has been a member of the National Wildlife Foundation, the Rocky Mountain Elk Foundation, the Cousteau Society, Ducks Unlimited, and Quail Unlimited. He has a bachelor's degree from the University of Missouri–Columbia and a law degree from the University of Missouri–Kansas City. His father and grandfather raised him on the Bourbeuse, Courtois, and Meramec rivers, and he fished and hunted at an early age. He has fished and hunted throughout Missouri, the surrounding states, Canada, the western states, the East Coast, Florida, the Caribbean, and Central America. Some of his proudest moments include his work on the Columbia Bottom, Four Rivers, and Nodaway Valley conservation areas, and the Private Lands Program. A wetland unit in Nodaway Valley Conservation Area was named for him in 2004.



## Commissioners



### Howard L. Wood (R)

Bonne Terre, 1997–2003

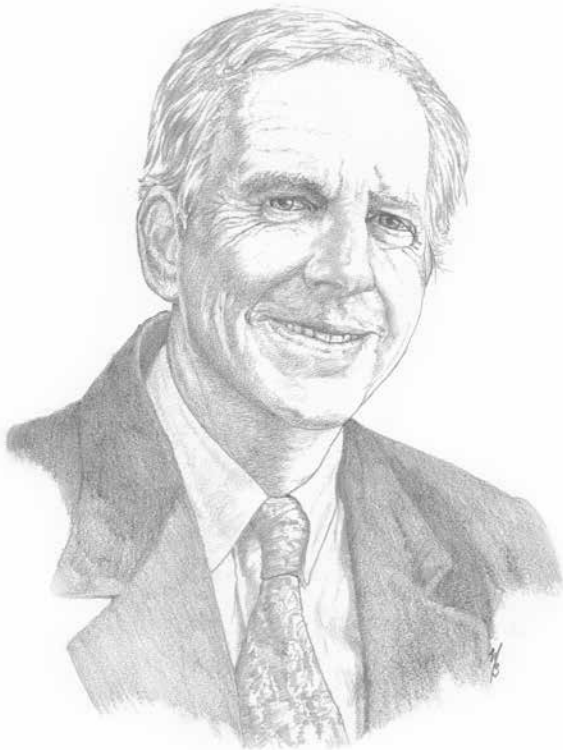
Howard Wood has been a member of the Conservation Federation of Missouri board of directors for some 40 years, and he served as its president in 1984–1985. He graduated from Washington University, where he received the Olin Distinguished Business Alumni Award in 1992, the University Distinguished Alumni Award in 1996, and the Robert S. Brookings Award in 2012. He is a certified public accountant and was a partner with Arthur Andersen & Co. He later co-founded two of the largest cable television companies in the United States.

He helped establish Operation Game Thief, a cooperative project of the Conservation Federation of Missouri and the Department for reporting wildlife violations. He has been a tireless advocate for youth hunting seasons.

Wood is a native of Bonne Terre, where he owns and operates a cattle farm. In addition, he owns several thousand acres of timberland subject to a conservation easement in a cooperative effort to protect the Current River watershed. He is an ardent quail and wild turkey hunter and dog trainer. The Howard and Joyce Wood Education and Visitor Center at the Columbia Bottom Conservation Area is named to honor him and his wife.

### Stephen C. Bradford (D)

Cape Girardeau, 2001–2007



For nearly four decades, Stephen Bradford has worked in the public and private sectors specializing in financial management and business development. He served in leadership roles for five Missouri governors and as Commissioner of Administration for Democratic and Republican governors. He currently operates Missouri's largest home-health services company and runs several farming operations.

Bradford has a lifelong interest in conservation efforts and outdoor activities. A Conservation Federation of Missouri life member, he also serves on the Federation's board of directors. He is also a board member of the Missouri Conservation Heritage Foundation. As a conservation commissioner, Bradford worked to improve the Department's financial management and to increase and improve Missouri's trout and quail populations. A 2,087 acre unit of Black Island Conservation Area in Pemiscot County, near the Mississippi River, bears his name.



## Cynthia Metcalfe (D)

St. Louis, 2001–2007

Cynthia Metcalfe gained a lifelong love of the outdoors exploring nature as a child in St. Louis County.

As commissioner, she promoted land and program management to ensure that all Missourians, especially children, may enjoy nature as well.

A Smith College graduate, she worked as an IBM systems designer in the financial industry. After completing the Leadership St. Louis Program, she turned to volunteer community service, leading, with others, tax and governance campaigns, volunteer and public-education programs, and public-policy development for nonprofit boards and local governance bodies. Community service highlights include the University City Council, the St. Louis County Boundary Commission, Great Rivers Greenway, and the Audubon Center at Riverlands.

Metcalfe serves on the Missouri Conservation Heritage Foundation board and supports the Missouri Conservation Federation. She and her husband, Walter, are restoring forest, prairie, and cropland at their Missouri River farm. As a Master Gardener, she controls invasives in favor of native plant species.



## Lowell Mohler (R)

Jefferson City, 2003–2009

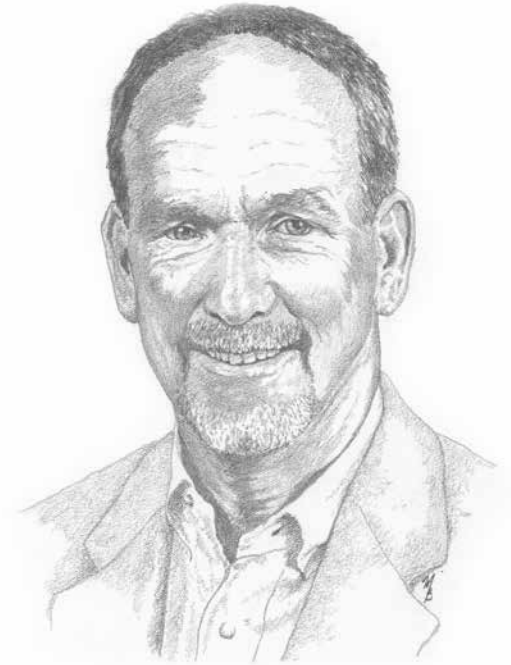
Lowell Mohler is a farmer and a native of Oregon, Mo. He has a record of conserving forests, fish, and wildlife and a history of building bridges between conservation and agriculture.

Mohler holds a bachelor's degree from the University of Missouri's College of Agriculture. He has served as director of the Missouri Department of Agriculture. He also has served as chief operating officer of the Missouri Farm Bureau, senior vice president and national board member of Ducks Unlimited, member of the Conservation Federation of Missouri, and chairman of the University of Missouri School of Natural Resources Advisory Council. He is also a board member of the Missouri Conservation Heritage Foundation. He is also actively involved in the Missouri State Fair, where he currently serves as vice chairman of the board of directors.

Mohler received the G. Andy Runge Award from the Missouri Chapter of the Wildlife Society and was named Master Conservationist by the Conservation Commission in 2001. He continues to be active in the family farming operation on the Missouri River near Jefferson City and farms in Holt County.



## Commissioners



### William F. "Chip" McGeehan (R)

Marshfield, 2005–2011

Chip McGeehan worked summers as a Department fisheries assistant while earning his Bachelor of Science degree in fisheries and wildlife management at the University of Missouri–Columbia. McGeehan went on to pursue a career in business, but he remains dedicated to wildlife management and conservation. He sustainably grazes herds of bison on his 1,000-acre ranch along the James River in Webster County, where he also hosts annual hunting and fishing opportunities. He enjoys bow hunting and angling, and he is very active in the recruitment of youth hunters. He is a lifetime member of the Conservation Federation of Missouri and serves on the Federation's board of directors. McGeehan was highly instrumental in the Department's elk restoration program, and he is a lifetime member of the Rocky Mountain Elk Foundation.



### Don R. Johnson (D)

Festus, 2007–2013

Don Johnson, an enthusiastic hunter and angler, was president of the Conservation Federation of Missouri from 2006 until his appointment to the Commission in 2007. In addition to serving as the Federation's president, he has held the posts of second and first vice president, has chaired the Ways and Means, and Executive committees, and has served on the Waterways Resources, Deer, Turkey, and Ruffed Grouse committees.

Johnson is also a member of the National Wildlife Federation and the National Rifle Association. Active in archery education, Johnson helped launch Missouri's National Archery in the Schools Program. Johnson served on the Missouri State Park Advisory Board for eight years. He was also chosen as one of the four national finalists for the Budweiser 2012 Conservationist of the Year Award. He earned a Bachelor of Science degree in zoology from Howard University in Washington, D.C. He also served as a pilot in the U.S. Air Force, flying 130 combat missions in Vietnam, earning four Air Medals and two Distinguished Flying Crosses.



## Becky L. Plattner (D)

Grand Pass, 2007–2013

Becky Plattner served as twice-elected presiding commissioner and budget officer of Saline County from 2002 to 2010. She co-owned and worked as the financial manager of Plattner Brothers Custom Farming, LLC, with her husband and family for 19 years.

Plattner attended Missouri Valley College, majoring in public relations. With deep roots in both agriculture and conservation, she enlightens audiences about farm issues through public speaking engagements, and she proudly promotes women in agriculture and the outdoors.

Plattner has served on several boards and is a lifetime member of the National Wildlife Conservation Federation. She is also a member of the Missouri Farm Bureau, Missouri Corn Growers Association, Saline County Chapter of Quail Unlimited, Saline County Cattlemen's Association, Santa Fe Agri-Leaders, and Missouri Young Farmers. In addition, Plattner is a strong supporter of Future Farmers of America and 4-H.



## Don C. Bedell (R)

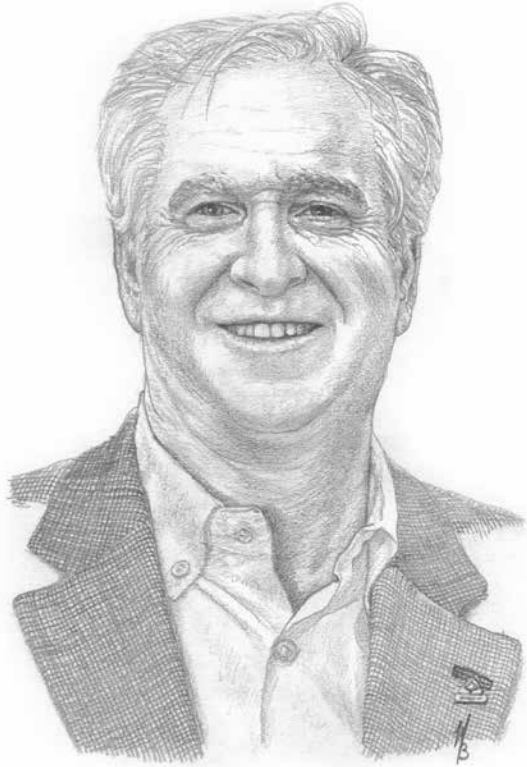
Sikeston, 2009–2015

Don Bedell is an accomplished businessman, avid conservationist, and enthusiastic sportsman. He is a life sponsor of Ducks Unlimited, a life member of Quail Unlimited, Inc., a sustaining member of the Conservation Federation of Missouri, a diamond sponsor of the National Wild Turkey Federation, and a life member of Safari Club International. He holds a Bachelor of Science degree in agriculture and a Master of Science in animal nutrition, with a double minor in biochemistry and wildlife.

He is owner of B & B Boats and Bikes in Sikeston, and B & R Marine & Cycle in Batesville, Ark. He has founded and run numerous other businesses, primarily in healthcare and nursing-home management. He serves on several boards of directors, including those of banks and private and publicly traded companies. Bedell serves as an advisory board member to the Southeast Missouri State University College of Health and Human Services; a member of the Southeast Missouri University Foundation; a member of the Three Rivers Community College Foundation in Poplar Bluff, Mo.; and on the Lyon College Board of Trustees in Batesville, Ark.



## Commissioners



### James T. Blair IV (R)

St. Louis, 2011–2017

James Blair is past president of the Missouri Conservation Heritage Foundation, a current board member for the Conservation Federation of Missouri, newly elected CEO of Great Rivers Habitat Alliance and has served on local and national committees for Ducks Unlimited. He is widely recognized as a top fundraiser in eastern Missouri for Ducks Unlimited. He and his wife, Anna, are avid hunters and outdoor enthusiasts.

Blair's history with the Department goes back to 1965, when his father served as a commissioner until 1977.

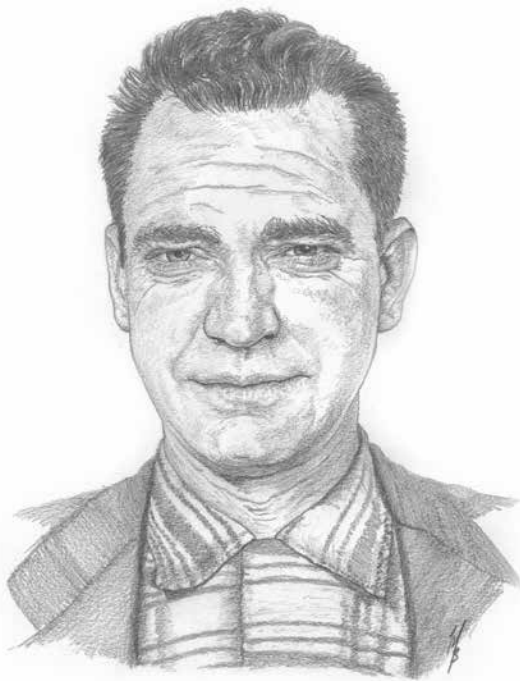
Blair is a principal and member of the board of directors at Moneta Group LLC, one of the nation's largest registered investment advisory firms. He is a certified financial planner and an accredited wealth-management advisor. He is regularly ranked among the top financial advisors in the country. In addition to his passion for conservation, Blair serves as an advisory board member for the National Multiple Sclerosis Society Corporate Achievers Campaign, and he is also a Barnes-Jewish Hospital Foundation board member.





## Master Conservationists

The Master Conservationist Award was created in 1941 as the highest honor the Department could bestow upon citizens of the state who had accomplished exemplary conservation work. It was first presented in 1942. There were awards every year from 1942 until 1950. Then there was a lapse of 18 years until R.A. Brown, a member of the Conservation Commission from 1945 to 1951, was awarded the honor in 1968. At that time, the commission agreed the Master Conservationist Award should only be given when genuine merit demanded it, and not necessarily be awarded annually. Master Conservationists inducted from 1942 through 1985 are listed in Keefe's *The First 50 Years*.



### Woody Bledsoe

Jefferson City—1990

Woody Bledsoe, the “Singing Forester,” worked his entire career promoting conservation and was a major influence on thousands of Missourians. Bledsoe started as a firefighter in 1952 with the Department’s Forestry Division. In 1953, he formed a country music band with other Department employees and created radio shows that promoted fire prevention. He designed a mobile motion-picture unit called the Showboat and toured Missouri spreading the conservation story in rural schools, churches, stores, and at fairs. He became known statewide as the voice of Smokey Bear.

Bledsoe later transferred to the Information Section and became responsible for radio and television programs as well as exhibits. His radio show was carried on more than 70 radio stations. He recorded hundreds of radio and television public service announcements relating to conservation and he hosted a regular television show called *Missouri Outdoors*.

Woody’s down-home, folksy manner attracted thousands of faithful listeners and viewers, and he played a key role in fostering a stronger conservation attitude for many Missourians. He passed away in 1991.



## G. Andy Runge

Mexico—1990

Andy Runge was an exceptional force in the conservation movement in Missouri beginning in the mid-1960s. He was active in many resource-related organizations. Among his many roles were as president of the Missouri Prairie Foundation; president of the Conservation Federation, during which he founded the StreamCare Committee which developed the Stream Team concept; Conservation Commissioner for six years; member of the steering committee of the Citizens Committee for Conservation, which promoted the one-eighth of 1 percent sales tax; co-chairman of the Missouri Citizens for Clean Water; vice-chairman of the Citizens Committee for Soil, Water, and State Parks (one-tenth of 1 percent sales tax initiative); member in the KATY-Missouri River Trail Coalition; served on the University of Missouri Board of Curators; was chairman of the University of Missouri's School of Forestry, Fisheries, and Wildlife advisory council; vice-chairman of the University of Missouri Agriculture Foundation; president of the local chapter and district chairman of Missouri Ducks Unlimited; and was a national trustee of Ducks Unlimited.

He was also a founding member of the Missouri Ruffed Grouse Society. He was a landowner in Callaway and Monroe counties, and created wildlife habitat on his properties. He passed away in 1991 while quail hunting.



## Carl R. Noren

Jefferson City—1991

Carl Noren was director of the Department from 1967 to 1979. He spearheaded the Design for Conservation plan at the outset of his directorship. He realized that Missouri had reached a plateau in its conservation efforts and that conservation programs should have a broader scope as well as new financial bases to support them. Carl worked during the long campaign to educate voters about the proposed expansion plan.

He was hired at the Department as a biologist and project leader in 1940. Noren was involved in a variety of important Department programs, including wildlife, fisheries, land acquisition, and water resources management. He also had leadership assignments with the International Association of Fish and Wildlife Agencies. The Conservation Federation of Missouri bestowed its first Water Conservationist of the Year Award upon him in 1965, and in 1977 named him the Conservationist of the Year. In 1987, he received the American Motors Conservation Award for distinguished service. He passed away in 2002.



## Master Conservationists



### Ralph W. Lucas

Raymore—1992

Ralph Lucas was one of Missouri's foremost citizens in the area of natural land protection and stewardship. Throughout his relationship with The Nature Conservancy alone, Lucas was involved with virtually every transaction leading to the acquisition and protection of more than 38,000 acres.

Lucas and his wife, Virginia, acquired and made gifts of land to The Nature Conservancy, the College of the Ozarks, and the Department. They gave the historic Boston Ferry National History Area, home of the endangered Swainson's warbler, to the Department to manage.

Perhaps Lucas' favorite contributions involved his work with prairies. He located, evaluated, and made the initial landowner contacts on many of the prairie tracts purchased by the Department in the 1970s and 1980s. As a volunteer, he performed similar services for The Nature Conservancy and the Missouri Prairie Foundation. Lucas also played a vital role in the establishment of Prairie State Park.

Lucas was an active member of the Conservation Federation of Missouri. He received The Nature Conservancy's prestigious Oak Leaf Award and was the 1990 recipient of the Conservation Award from the Daughters of the American Revolution. He passed away in 2004.



### E.J. "Sy" Seidler

St. Louis—1993

Citizen conservationist Elmore J. "Sy" Seidler joined the Southside Division of the Conservation Federation in 1954 and has held nearly every office in that organization. He formed the Junior Member Organization of the Southside and coordinated the annual Southside Workshop for Teachers. He also promoted the recycling project. During his presidency, the Southside Division won the National Wildlife Federation's President's Award and the Conservation Federation's Roland Hoerr Award.

For his efforts in the St. Louis area to pass the one-eighth of 1 percent sales tax, the Conservation Federation named him Conservationist of the Year in 1976. He received the Conservation Federation's President's Award in 1970, and the Conservation Award from *Hunting and Fishing Weekly* in 1972. In 1978 and 1979, Seidler served as president of the Conservation Federation of Missouri. He served on the Weldon Spring Task Force Committee. Seidler continues his conservation efforts locally through the Southside Division, and statewide as a board member and executive committee member of the Conservation Federation of Missouri.



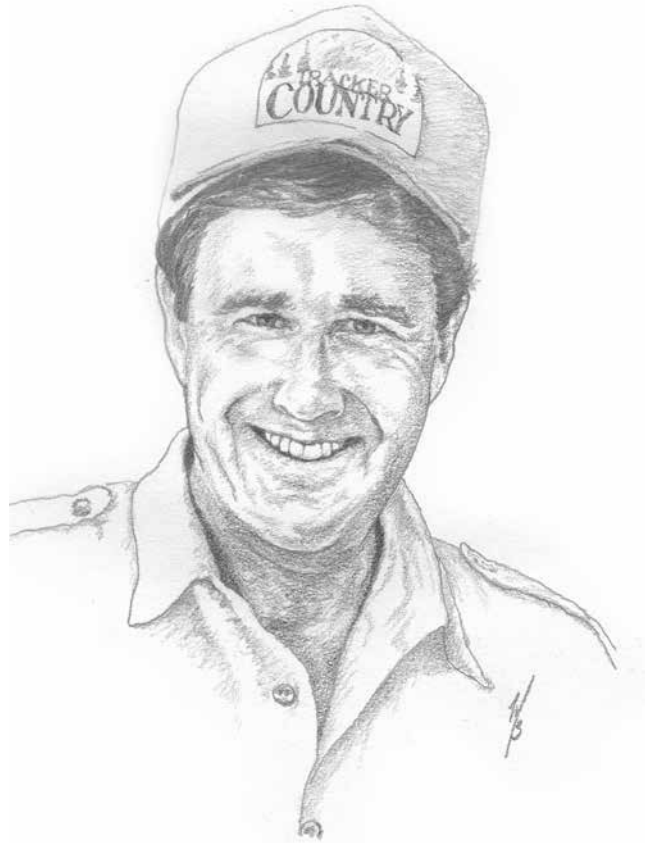
## John L. Morris

Springfield—1993

As founder and president of Bass Pro Shops, John L. Morris believes in investing in the natural resources around which he has built a business. He supports organizations such as the National Wild Turkey Federation, Ducks Unlimited, the Bass Research Foundation, the Sport Fishing Institute, the Wildlife Legislative Fund of America, and the National Fish and Wildlife Institute. Bass Pro Shops is the major contributor to the Operation Game Thief anti-poaching program in Missouri.

In 1991, Morris was elected chairman of the National Fish and Wildlife Foundation, and he served on the Board of Trustees for the International Game and Fish Association. He donated \$50,000 to the University of Missouri–Columbia for construction of the School of Natural Resources building.

Morris has received numerous awards for his conservation work. In 1990, the Wildlife Legislative Fund of America awarded him the Conservation Achievement Award. Later in that year, President George Bush presented Morris with a Teddy Roosevelt Conservation Award. The Sport Fishing Institute named him 1992 Fisherman of the Year.



## Elizabeth “Libby” R. Schwartz

Coeur d’Alene, Idaho—1994

Elizabeth “Libby” R. Schwartz began work as a professional biologist in the 1940s. She met graduate student Charles Schwartz in 1930 while she was teaching zoology at the University of Missouri, where she earned a doctorate. She quit teaching to marry Charles and later took over his prairie chicken research project for the Department when he was called for military duty.

Schwartz worked for the Department for 30 years, collaborating with Charles on numerous books, magazine articles, and award-winning nature films and documentaries. She also wrote children’s nature books.

Together, the Schwartzes wrote *The Wild Mammals of Missouri*, first published in 1959. They also wrote *About Mammals and How They Live*. Two years after Charles passed away, Libby finished it, and it was published by the Department in 1993.

Foremost experts on American wildlife, the Schwartzes conducted pioneering research on prairie chickens, box turtles, monkeys in Puerto Rico, and the game birds of Hawaii. They both contributed extensive time and energy on the conservation sales tax campaign in 1976.



## Master Conservationists



### Donald C. Pharis

Liberty—1994

Donald C. Pharis' association with the conservation movement dates back to the 1920s, when he was a vocational agriculture teacher. He bought an abused Missouri farm in 1927, which he turned into a model of soil and water conservation, and he used it as a demonstration site for good farming practices.

In 1943, Missouri passed enabling legislation for Soil and Water Conservation Districts, and Pharis started the drive to establish a district in Clay County. He was the first chairman of the board of supervisors and served as a supervisor from 1944 to 1952. He earned an award for distinguished service as president of the Missouri Association of Soil and Water Conservation Districts.

Pharis' farm was a center for the education of teachers and young students. He sponsored the first teachers' course in conservation education. As president of the local school board, he incorporated conservation into the curriculum. Pharis was a great friend of the Department until his death in 1992.



### Dennis Ballard

Sturgeon—1996

Dennis Ballard organized the Columbia Area Archers in 1992, which was the club that initiated what is now known as the Share the Harvest venison donation program. In this program, deer hunters donate part of their kill, through intermediate distributors, to families who would otherwise not be able to afford high-quality meat. Ballard worked with legislators, health officials, and the Department to iron out other complex problems before the program could go statewide. Hunters across Missouri now share their venison with people in their own communities. Ballard has been involved with other conservation issues as well, including bowhunter education and expansion of the involvement of the Missouri Bowhunters Association with the Conservation Federation of Missouri.

He was director of the Conservation Federation from 1999 to 2003 and was director of the Land Learning Foundation, which teaches youth, women, and the disabled how to hunt and fish.



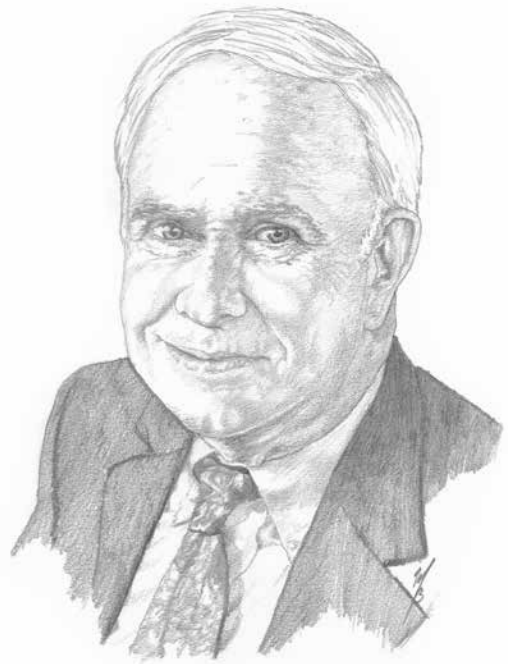
## Peter H. Raven

St. Louis—1997

Peter Raven is a world-renowned scholar and advocate of conservation and biodiversity. For four decades, he headed the Missouri Botanical Garden, an institution he nurtured into a world-class center for botanical research and education and horticultural display. He retired as president in 2010 and assumed the role of president emeritus and consultant through 2014.

He developed the organization's research program in tropical botany into one of the most active in the world. He has increased public awareness of ecological problems in the tropics and the need for preservation of plants and animals in Missouri as well as throughout the world.

He has degrees from the University of California—Los Angeles and the University of California—Berkeley. Raven was a member of the Department of Biological Sciences at Stanford University and is the author or editor of 18 books and more than 450 scientific papers. He has served as a member of the Board of Curators of the University of Missouri and as a member of the National Sciences Board.



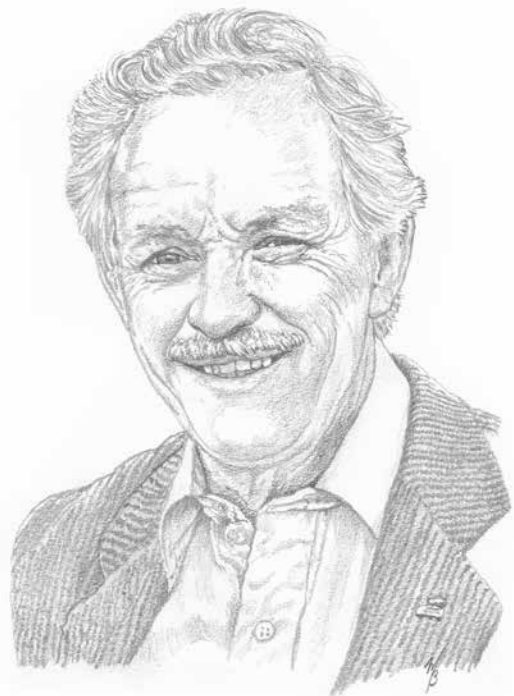
## James F. Keefe

Jefferson City—1998

James F. Keefe worked for the Department for more than 36 years. He headed the former Information Section from 1958 through 1985, where he was editor of the *Missouri Conservationist* magazine for 28 years. His greatest contribution to conservation in Missouri was his editorship of the magazine, with which he shaped the conservation conscience of the public and, to a great extent, the Department. During his stint, the magazine grew in monthly circulation from 20,000 to nearly 400,000.

Keefe was one of the major players in 1976 for the one-eighth of 1 percent sales tax campaign. He worked behind the scenes to complement the work of his wife Doris, better known as “Dink,” who managed the successful volunteer effort to establish the tax.

He served on the Department's Regulations Committee for many years and provided a key user perspective on regulation issues. He authored the Department's history, *The First 50 Years*, and many other publications. The Outdoor Writers Association of America honored him in 1980 with its highest award, and in 1983 he was honored with the I.T. “Ping” Bode Distinguished Service Award. He passed away in 1999.



## Master Conservationists



### Charles M. Schlanker

De Soto—1998

Charles Schlanker shared his love of the environment with Missouri students of all ages during his long career as an educator. He began his career teaching science at Montgomery County High School in Troy, Mo.

While earning a master's degree, Schlanker taught biology and conservation at the Kansas State Teachers' College in Emporia. During this time, he helped create a DNA action model that was used to teach science in high schools, colleges, and universities around the world.

Schlanker taught at Jefferson College in Hillsboro, Mo., where he took advantage of the renewed interest in ecology in the 1970s by forming its first student conservation group, the Clean Earth Society, which eventually recycled and sold more than 360 tons of newspapers. Schlanker also established and maintained the college's nature trail. In the 1980s, he organized the successful Citizens Against Pine Ford Dam campaign.

Schlanker retired from teaching in 1992. He was a member of the National Geographic Society, The Nature Conservancy, and the World Wildlife Fund. He used his knowledge to inform legislators about conservation issues. He passed away in 2005.



### Albert R. Vogt

Columbia—1999

Albert R. Vogt served as director of the University of Missouri School of Natural Resources from 1985 to 2003. He energized the school with his charismatic leadership style and conservation vision. During his years as director, he led numerous successful efforts to enhance natural resource and conservation education in Missouri.

Vogt's achievements include the addition and integration of the disciplines of forestry, fisheries, wildlife, parks, recreation, tourism, soils, atmospheric science, and environmental science into a School of Natural Resources. He obtained approval and funding to construct the Anheuser-Busch Natural Resources Building to house, for the first time, all disciplines of the school. He championed for minority recruitment programs to increase diversity. He also initiated plans for securing funding to establish endowed chairs in forestry, fisheries, and wildlife to attract leaders to the school's faculty.

He played a vital role in the formation of the Conservation Federation of Missouri's Conservation Leadership Corps and remained dedicated to that effort. Vogt received his Bachelor of Science, Master of Science, and Ph.D. degrees in Forest Management and Tree Physiology from the University of Missouri.



## Lowell Mohler

Jefferson City—2001

Lowell Mohler dedicated his career to enhancing the relationship between agriculture and conservation. He served as a Conservation Commissioner from 2003 to 2009. For 26 years, Mohler served as chief administrative officer and corporate secretary of the Missouri Farm Bureau Federation, retiring in 1996. He is a former national vice president of Ducks Unlimited and a member of the University of Missouri's School of Natural Resources advisory council.

Mohler also worked with federal legislators on the Conservation and Reinvestment Act, legislation that is crucial to the long-term health of wildlife in the United States. He was instrumental in helping to secure funding for the construction of the Anheuser-Busch Natural Resources Building at the University of Missouri—Columbia.

Mohler has been named Man of the Year in Agriculture by *Missouri Ruralist* magazine and Ag Leader of the Year by the Missouri Ag Industries Council. He also has received the Missouri University Distinguished Service Alumni Award and the Missouri Chapter of the Wildlife Society's G. Andy Runge Award.



## G.E. "Shag" Grossnickle

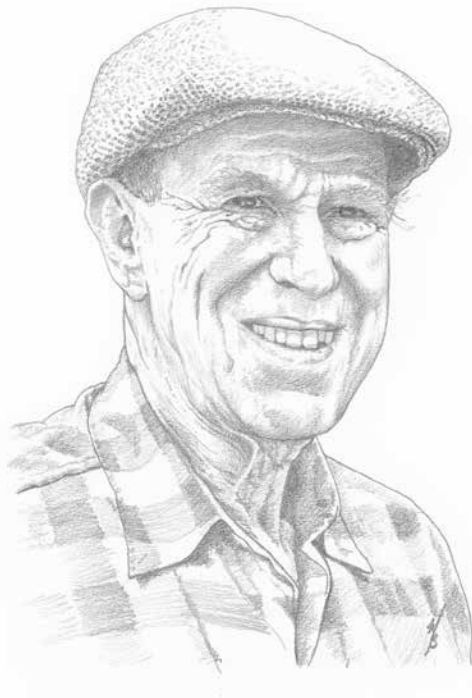
Kirkville—2005

In the 1950s, while "Shag" Grossnickle was on a deer-hunting trip in Douglas County, he saw a large bird glide through the timber. A local resident told him he had observed a wild turkey. Grossnickle was then committed to bringing this majestic bird to the landscapes of northern Missouri. Department officials told him that restoration required private landowner support. Grossnickle went door-to-door and eventually received commitments to support turkey restoration from private landowners who owned 20,000 acres in a continuous block. Finally, Department officials examined an Adair County release site, and in 1961 Department staff brought the first 20 turkeys to Adair County.

Grossnickle was instrumental in restoring wild turkeys to northern Missouri at a time when conventional wisdom held that turkeys could not survive in the sparsely wooded counties north of the Missouri River. Today several northern Missouri counties have some of the state's top turkey harvests.



## Master Conservationists



### Leo and Kay Drey

University City—2005

Leo and Kay Drey have devoted their lives to environmental conservation. As the largest private landowner in Missouri, Leo has been a steward of natural resources and a forestry management pioneer. His individual tree-selection method of logging has been recognized nationally as environmentally responsible forest management.

Leo helped establish conservation policies for the State of Missouri and the federal government, including creation of wild rivers legislation and the Ozark National Scenic Riverways. He was instrumental in the formation of the Open Space Council of St. Louis and the Missouri Coalition for the Environment. He funded the Natural Areas Survey for Missouri and the Natural Streams Act campaign.

He has spent his life and finances preserving many of the natural treasures of Missouri for future generations. He established the L-A-D Foundation to fund projects and hold in trust natural areas for preservation. One holding of the L-A-D Foundation is Pioneer Forest, 141,000 acres located in the heart of the Ozarks, which serves as a model for forest management and conserves exemplary plant and wildlife communities.

Kay Drey's conservation career grew out of a lifelong concern for the environment. She helped found the Green Center, which promotes arts- and nature-based conservation programs in University City. She has worked with the Great Rivers Environmental Law Center and the Coalition for the Environment, addressing the environmental effects of hazardous and radioactive waste.





## Lina and Harry Berrier

Columbia—2006

Harry Berrier, a retired associate professor of veterinary clinical pathology at the University of Missouri, and his wife, Lina, a voice instructor at Stephens College, started making barbecue sauce for family and friends when they could not find one they liked. In 1975, the recipe was patented, and Show-Me Bar-B-Q Sauce was born. Their small business is operated out of the basement of their Columbia home and marketed all over the United States.

In December 1985, the Berriers presented the Conservation Commission with a gift of \$25,000, with the stipulation that a trust be established and all future donations be applied toward the purchase of land to be named in their memory following their deaths. They have continued giving annually. As of 2012, their donations to the Department have exceeded \$1.3 million.



## Master Conservationists



### Pat Jones

Williamsburg—2006

Pat and her late husband, Edward “Ted” Jones, have long been recognized as movers and shakers on the conservation front in Missouri. She credits her mother, Hilda J. Young, with her conservation heritage and love of the natural world.

In 1986, the Department acquired 970 acres in Jefferson County owned by the Truman P. Young Foundation. Ted and Pat held one-fourth interest in the property, which they donated to the Department. The property was named the Hilda J. Young State Forest for Pat’s mother.

In 1997, Pat donated the 710-acre Jones family farm in Callaway County to the Department. Now known as Prairie Fork Conservation Area, many of its activities are funded through the Prairie Fork Trust, which she established as part of the donation. She later donated a 205-acre parcel adjoining property.

Pat is also involved in the Katy Trail State Park legacy; expansion and management of the Grand Grasslands Conservation Area in concert with The Nature Conservancy; Confluence State Park; Missouri Botanical Gardens; and the St. Louis Zoo.



### Vicki Richmond

Kansas City—2007

Vicki Richmond is best-known for her work with the Blue River Watershed Association in Kansas City. She has also been an active volunteer in Missouri Stream Team 175/Friends of Lakeside Nature Center since 1990. She has been instrumental in coordinating the annual Blue River Rescue, which is responsible for removing an average of 75 tons of trash per year from a 7.2-mile stretch of river. The group has planted more than 35,000 trees to stabilize stream banks and reforest the riparian zone.

Richmond is involved in water quality monitoring, community outreach, and extensive education efforts. She was instrumental in writing an EPA grant that provided funds for a Blue River mitigation project, website development and maintenance, informational handouts, workshops, and hands-on educational opportunities for schoolchildren.

In 2010, those efforts earned Richmond an international Clearwater Award at the Urban Waterfronts 2010 Conference in Baltimore. The award recognizes excellence and innovation in projects that engage the public in awareness and restoration of urban water resources.



## Sgt. John T. Wright

Excelsior Springs—2007

Sgt. John T. Wright of the Clay County Sheriff's Office was an avid outdoorsman who loved to fish and to help others in need. Wright created Operation Small Fry to reach at-risk boys and girls and to provide a positive interaction between youth and law enforcement. The first fishing clinic was held in 1996 with 12 youths participating. In 2006, it grew to 150 youths, with each child receiving a free rod and reel, tackle box, and other prizes, which were supplied through donations and the sale of raffle tickets. County law enforcement officers donated their time for the event. Wright worked tirelessly to make this event a positive experience for at-risk youth. In 2004, Wright stated that learning to fish gave children something to do and kept them out of trouble. Instead of going to the corner to hang out, there is always a lake, pond, or creek to fish. He passed away in 2007.



## Nadia Navarrete-Tindall

Columbia—2008

Nadia Navarrete-Tindall, a research scientist at the University of Missouri, conducts research on natural areas restoration and evaluates native cool-season grasses, forbs, and shrubs with potential use for landscaping and wildlife. She organizes Native Plant Field Day at Bradford Research and Extension Center each year and is involved in outreach and education for students, farmers, landowners, teachers, training groups, and the public.

She founded and coordinates Columbia Verde, a grassroots group that educates Hispanic Missourians and other minorities about environmental protection. Columbia Verde's bilingual workshops and field days promote acceptance of native plants on small farms, reducing dependency on chemicals, and lowering the cost of farming.

She also serves as director of the Department of Rural Sociology's Women and Minority Farmers Program at the university, which offers workshops on sustainable farming for small farmers, with an emphasis on nurturing the land, building communities, generating wealth, and providing opportunities for future generations.



## Master Conservationists



### Warren Wiedemann

New Haven—2009

Warren Wiedemann, a retired conservation agent, served the citizens of Missouri in Franklin County for more than 31 years. During that time, Wiedemann shared his love of the outdoors and his knowledge of hunting, trapping, and fishing. He taught hunter education classes and conducted programs at 4-H camps, encouraged youth participation in outdoor activities by giving talks at local schools, and enlisted local hunting and fishing clubs to promote conservation through a Hunting and Fishing Day in Franklin County.

Wiedemann immersed himself in his community. He worked closely with farmers on developing food plots for wildlife and stocking farm ponds to ensure a proper ecological balance. He apprehended poachers and vigorously enforced Missouri's *Wildlife Code*. He and his family spent countless hours working for the one-eighth of 1 percent sales tax. When the measure was approved, he persuaded landowners either to donate or to allow the Conservation Commission to develop accesses to Franklin County's many rivers and streams.

During the latter part of his career, Wiedemann assisted in training new conservation agents, and he continued to mentor new agents in his retirement.



### Bill T. Crawford

Columbia—2010

Bill T. Crawford carried petitions for the 1936 vote to establish the Conservation Commission. He also has the distinction of being the youngest attendee at the September 1935 meeting at the Tiger Hotel in Columbia, Mo., that established the Conservation Federation of Missouri (originally formed as the Restoration and Conservation Federation of Missouri). Crawford was the only living member from that group to attend the 75th anniversary celebration of the Commission's founding.

Crawford's love of the natural world, along with encouragement of some of his father's friends (Aldo Leopold, Rudolf Bennitt, and others), led him to study biology at the University of Missouri—Columbia. In 1942, he was hired by the Department as one of the "second round" of biologists to bring science to the management of wildlife in Missouri. He traveled throughout Missouri promoting the Department and doing outreach and education. His work evolved into assisting other biologists on a variety of studies, and he was the first chief of Wildlife Research, located in Columbia. He took a rather loosely organized and disparate group of researchers and turned it into a cohesive unit that became the envy of many wildlife agencies across the country.



## Leroy Korschgen

Columbia—2010

Leroy Korschgen began his employment as a biologist for the Department in 1946 and spent the next 37 years as a wildlife food habits and nutrition expert. He provided food habits data on more than 93 species ranging from bullfrogs to mountain lions. He could identify most seeds, feathers, bones, tissues, and insects brought into his laboratory. He began a study to “fingerprint” more than 2,500 species of native Missouri plants and developed a reference herbarium containing more than 1,850 plant species. In 1983, he published the results in a 1,827-page volume.

Poaching of deer was a problem during the early deer restoration efforts of the 1940s and 1950s. Korschgen was instrumental in developing the precipitin test, a method of positively identifying deer meat, which was of great value to wildlife law enforcement for decades.

He also made significant contributions in identifying the negative impacts of “hard” pesticides on wildlife. Because of the work of Korschgen and his colleagues at the Department, dieldrin was deauthorized for general use.



## Oscar “Oz” Hawksley

Warrensburg—2012

Oscar “Oz” Hawksley is known to thousands of Missourians whom he taught about the outdoors during a six-decade teaching career at Central Missouri State University (now known as University of Central Missouri).

Following a tour of duty overseas during World War II, he received a master’s degree and Ph.D. from Cornell University. Hawksley developed numerous wildlife conservation courses as well as the first ethology course, the scientific study of animal behavior, in Missouri. For nearly 30 years, Hawksley sponsored and conducted field trips to help students develop outdoor skills and to understand the ecological significance of Missouri’s unique habitats.

He is a founding member of the Ozark Wilderness Waterways Club and American Whitewater, a fellow of the National Speleological Survey, and part of the group that founded American Rivers, a national organization instrumental in saving threatened rivers. As a long-time member of the Missouri Prairie Foundation, he has been active in prairie preservation and established a seven-acre demonstration prairie in Warrensburg. Hawksley’s *Missouri Ozark Waterways*, a guide to canoeing, encouraged the wide use of Ozark streams for recreation and produced a widespread interest in their preservation.



## Conservation Hall of Fame

The Conservation Commission created the Missouri Conservation Hall of Fame in 1988 to honor people who have made substantial contributions to forest, fish, and wildlife conservation in Missouri. The Hall of Fame honors deceased citizen conservationists, past employees of the Conservation Department, and people from other conservation-related agencies. Conservation commissioners and directors are not eligible for the award, since other avenues of recognition are available to them. They are listed chronologically according to when the commission inducted them into the Hall of Fame. Refer to Keefe's *The First 50 Years* for more detailed coverage of many inductees' extensive contributions to Missouri's conservation story.

### Paul G. Barnickol

Inducted in 1988



Paul Barnickol was one of the first professionally trained fishery biologists to work for the Conservation Department. As chief aquatic biologist, Barnickol organized the Department's first comprehensive fishery research and water quality programs in the state.

Barnickol began his Conservation Department career as a fisheries biologist in 1939 and rose to become superintendent of fisheries research, chief of fisheries, and then assistant director, a position he held until his death in 1976. He was one of the organizers of the Upper Mississippi River Conservation Committee, which continues to be an effective group for river resource conservation involving state and federal agencies.

He co-authored a landmark publication, *Commercial and Sport Fishes of the Mississippi River between Caruthersville, Mo., and Dubuque, Iowa*. He was also deeply involved in development and adoption of Missouri's first water quality law and establishment of its water pollution control agency.

He and Bill Crawford developed and co-hosted the Conservation Department's first regular television show on KOMU-TV, which ran for four years and 180 episodes.



## Rudolf Bennitt

Inducted in 1988

Rudolf Bennitt coauthored, with Werner Nagel, a landmark wildlife survey of Missouri published in 1937 entitled *A Survey of the Resident Game and Furbearers of Missouri*. It provided the science upon which many programs of the new Conservation Department were based. He played a vital role in development of the wildlife research unit at the University of Missouri and trained many students who went on to become professional conservationists in Missouri and throughout the world.

Bennitt received his Ph.D. in zoology from Harvard University in 1923. Before he began teaching at the University of Missouri, he held positions at the Marine Biological Laboratory at Woods Hole, Mass., at De Pauw University, and at Tufts University. He was first national president of The Wildlife Society. He was an influential adviser to the first Conservation Commission, and he helped develop the basic philosophy and organization of the Conservation Department.

A 3,500-acre conservation area at the junction of Boone, Howard, and Randolph counties, which was purchased in the 1960s, has been named for him.



## A. George Morris

Inducted in 1988

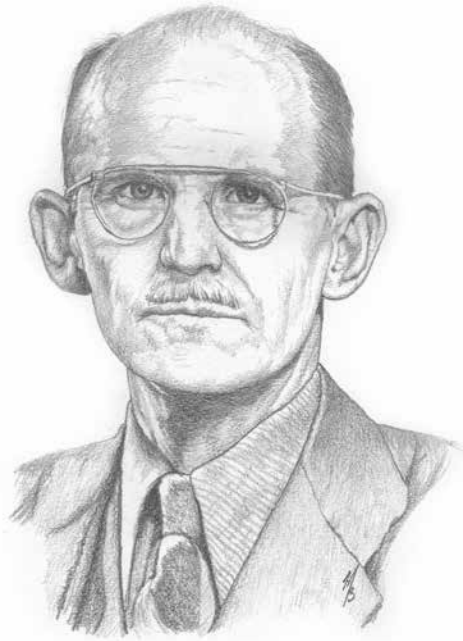
George Morris served originally as manager of a Fish and Game Department fish hatchery in 1933. After the formation of the Conservation Commission and the Conservation Department, Morris stayed on to become the Chesapeake Hatchery superintendent. In 1948, he was promoted to supervisor of Department hatcheries, a position he held until retirement in 1969.

While at Chesapeake Hatchery, Morris initiated Missouri's channel catfish propagation program—the second of its kind in the United States at the time. Morris developed still-used techniques for the propagation of channel catfish and helped develop one of the first usable dry diets for hatchery rearing of trout. Because of the use of pelleted food, there was a great savings of time and labor. The amount of food required to produce a pound of trout was also reduced, resulting in increased efficiency and reduced cost.

Morris was job trained, and he effectively nurtured, expanded, and enhanced the Conservation Department's warm- and cold-water hatchery programs for more than 30 years.



## Conservation Hall of Fame



### Werner O. Nagel

Inducted in 1988

Werner Nagel was the first graduate student of wildlife management at the University of Missouri and was one of the early biologists hired by the Conservation Department. He was the principal field investigator and coauthor, with Rudolf Bennett, of *A Survey of the Resident Game and Furbearers of Missouri*, published in 1937. This benchmark study served as a foundation for many early Department programs.

Nagel was a chief spokesperson for the Department from 1947 to 1957. He created the character of Cy Littlebee, whose homespun wisdom and humor educated thousands of Missourians about conservation. His book, *Cy Littlebee's Guide to Cooking Fish and Game*, published in 1959, remains one of the Department's all-time bestsellers. In 1970, the Department published his retrospective *Conservation Contrasts: Three Decades of Non-political Management of Wildlife and Forests in Missouri*.

Nagel conceived the Jade of Chiefs Award, the highest award conferred by the Outdoor Writers Association of America in 1956, and won the award in 1964. He also earned an American Motors Conservation Award.



### Ted Scott

Inducted in 1988

Ted Scott was one of the most active citizen conservationists in Missouri during the 1960s and 1970s. Scott was chairman of the Citizens Committee for Conservation, which spearheaded the drive for the one-eighth of 1 percent conservation sales tax in 1976—the most successful wildlife-funding program in the country. Scott was also active in other outdoor areas. He was a long-time Conservation Federation of Missouri delegate, board member, and its president in 1965–1966. He served by governor's appointment as chairman of the Missouri Clean Water Commission.

"Man has to be connected to the earth," Scott once said. "You raise a man on a city's cement pasture and he's missed something. It's good for a man to watch the wind and water play."

The Conservation Federation of Missouri bestowed several awards on him, including Water Conservationist of the Year in 1969, its outstanding board member award in 1970, and the Conservationist of the Year Award in 1971. In 1972, the Conservation Commission honored Scott with its Master Conservationist Award.



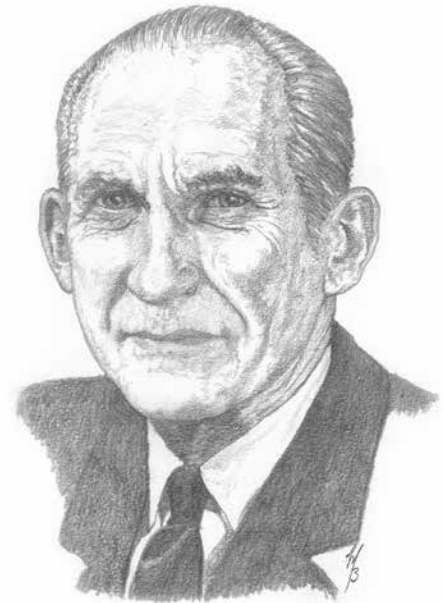
## Ruthford Henry Westveld

Inducted in 1988

Following field assignments with the U.S. Forest Service and teaching at Michigan State University, Westveld became professor of forestry at the University of Missouri, serving from 1936–1938. After heading forestry schools in Florida and Alabama, he returned to Missouri as chairman of the Department of Forestry and in 1957 was appointed director of the School of Forestry. During his tenure, he developed the forestry curriculum, secured accreditation, and established advanced degree programs. He served with distinction as director of the School of Forestry for 18 years.

Westveld was well-known nationally for his efforts to gain support for forestry research and as a member of the council Society of American Foresters. He was influential in securing passage of the McIntire-Stennis Act for cooperative forestry research among the states and federal government.

Westveld was a prolific writer, producing more than 50 articles and two widely used textbooks, *Applied Silviculture in the United States* and *Forestry in Farm Management*.



## George O. White

Inducted in 1988

George White was Missouri's longest-tenured state forester, serving for 21 years. After graduating with a degree in forestry from the University of Michigan, he worked as a surveyor in Michigan. He joined the U.S. Forest Service in 1938, just as it was establishing national forests in Missouri.

White organized and directed the Department's first forestry program, which remains vigorous to this day. He recognized the urgent need to control forest fires, and he worked to educate landowners about the harm of annual burning. He provided lookout towers to monitor fires, and he established a program to supply nursery stock to replant burned areas. Believing landowners who planted trees wouldn't burn them, he fostered the purchase of the first conservation-tree nursery, which is now named for him, at Licking, Mo. He initiated the purchase and management of the first Missouri state forests and worked effectively for the passage of the landmark State Forestry Act in 1946. He was instrumental in establishing professional management of state and private forestlands throughout Missouri.



## Conservation Hall of Fame



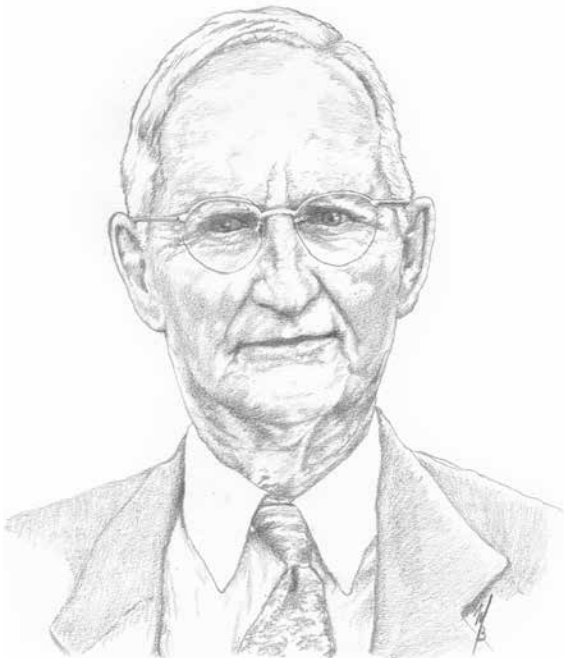
### Roland M. "Rollie" Hoerr

Inducted July 1989

"Rollie" Hoerr (pronounced "her") and other regional conservation leaders called a statewide meeting on Sept. 10, 1935 in Columbia, Mo., to form a federation of sportsmen to take conservation out of politics. They formed the Restoration and Conservation Federation of Missouri, known today as the Conservation Federation of Missouri (CFM). E. Sydney Stephens was elected president and Hoerr became vice-president.

The Federation's grassroots campaign secured the signatures required by initiative petition, then encouraged a positive vote, which resulted in the overwhelming approval of Proposition 4 on Nov. 3, 1936, which established the Conservation Commission. Hoerr then fought to protect the newly created Conservation Department from interference and helped steer Missouri's governors on a path of good Commission appointments based on merit, knowledge, and interest in wildlife and forestry conservation.

After Stephens was appointed chairman of the new Conservation Commission in 1937, Hoerr became de facto CFM president and assumed the task of making the Federation permanent. In doing so, he became known as the founder of CFM, which remains Missouri's largest membership-driven conservation organization.



### James T. Montgomery

Inducted July 1989

J.T. Montgomery was a lifelong conservationist who played a major role in drafting the initiative petition for Proposition 4 in 1936. E. Sydney Stephens said that to J.T. "belongs the credit for broadening the vision of those in attendance and for widening the scope of the measure subsequently presented to the people."

"Mr. Montgomery wisely suggested that any proposed law or amendment should include in its provisions attention not only to game and fish, but to songbirds and other wildlife of a non-game nature—and significantly to forestry," Stephens said.

Montgomery, better known by many as "Uncle Mon," was a well-known Sedalia lawyer for 60 years and a charter member of the Carter County Hunting and Fishing Club on the Current River—one of the oldest of its kind in the state.

He served as president of the Conservation Federation of Missouri from 1939–1941. He wrote parts of the *Wildlife Code* that are still used today. He was posthumously awarded the honor of Master Conservationist in 1943.



## Jay B. Morrow

Inducted July 1989

Jay Morrow began his conservation career as the Department's first field agent in 1940. He took a leave of absence to serve in the U.S. Navy from 1942 to 1944. When he returned to the Department, he served in positions of increasing responsibility, including assistant director, until his death in 1956.

Morrow's public-relations expertise and leadership skills ensured that the Department's future remained bright, even during the Department's tumultuous early years. At that time, the Department faced strong opposition, and Morrow was largely responsible for enabling the Conservation Commission and the Department to retain its authority. Morrow was a great trouble-shooter and he was adept at handling meetings where adverse conditions arose. He held 25 public meetings in 1953 to explain regulations. His diplomatic manner of listening and responding to antagonists achieved successful results, and he influenced the Department's rules-and-regulations process.



## Eugene M. Poirot

Inducted July 1989

Gene Poirot came to Missouri in 1923 with a college degree in agriculture and a desire to be a successful farmer. When his first 80-acre corn crop failed to produce a single ear, he sought a job as a vocational agriculture teacher. But the school turned him down, and he went back to his Lawrence County land to do the impossible: turn 1,800 depleted, rock-hard acres into a production model that changed the way farmers, scientists, and policy-makers thought about farming. Thousands came to see his work and hear him speak. While he emphasized the practicality of building soil and conserving water, he acknowledged that nature, which had made room for him, also had "room enough for the owl." Eventually, Poirot turned his popular talks into two books, *Our Margin of Life* and *Permission to Life*.

Respected by conservationists and farmers alike, he received numerous honors, including the Conservation Commission's Master Conservationist Award, Copper Publications' Master Farmer Award, and the W.G. Shelly Superior Achievement in Agriculture Award.



## Conservation Hall of Fame



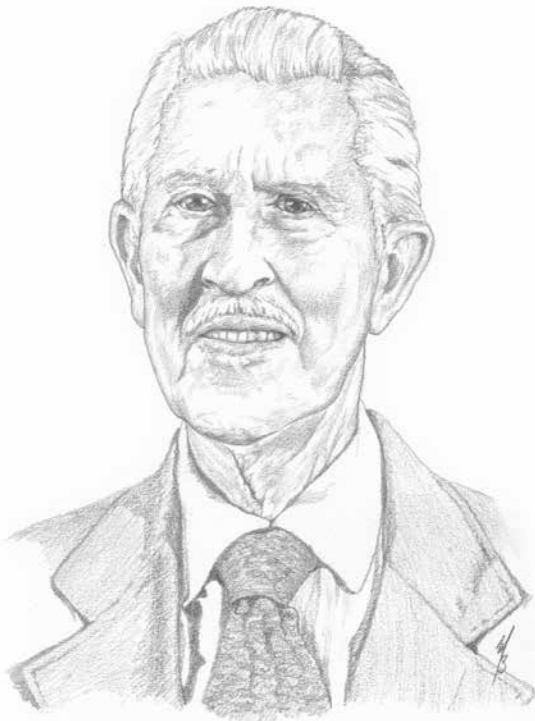
### Vernon Bennett

Inducted July 1989

Vernon Bennett was a field warden for the old Fish and Game Department from 1933–1937. The new Conservation Commission then retained him as a conservation agent. He was one of the first four Protection Section supervisors and rose through Department ranks to become chief of the Protection Section and, for the last 20 years of his service, served as chief of the Field Activities Division.

Bennett's achievements have contributed vastly to the state's resource enforcement for more than five decades. He developed the Department's outstanding conservation agent training program that remains one of the best in the nation. It was also the first of its kind to offer college credit. The close work of conservation agents with all Department personnel and related agencies for the preservation and conservation of Missouri's resources is a testament to his role in creating unified Department resource services.

Bennett served as president of both the Midwest Fish and Game Law Enforcement Officers Association and the Law Enforcement Section of the Southeastern Association of Game and Fish Commissioners.



### R. Marlin Perkins

Inducted July 1989

Director and then director emeritus of the St. Louis Zoo and long-time television personality, Marlin Perkins was an exceptional supporter of Missouri's conservation programs. Born in 1905 in Carthage, Mo., Perkins grew up on a farm, where his interest in animals emerged. As a boy, he followed the plowman, collecting what he turned up—toads, earthworms, grubs, a nest of baby mice. As an adult, Perkins won international renown as a wildlife conservationist through his television programs on wildlife, *Zoo Parade* and *Wild Kingdom*.

Perkins gladly loaned his prestige and his personal services to the Conservation Department for a number of years. He was an early supporter of the Design for Conservation campaign and served on the Citizens Committee for Conservation in helping pass the 1976 conservation sales tax. He testified before legislative committees on behalf of conservation and freely gave his time, talents, and prestige for conservation public-service announcements used on television and radio.



## Nancy “Nan” Winston Gardner Weber

Inducted July 1990

Author of the widely adopted slogan used in Missouri’s early conservation efforts—“Enjoy, do not destroy, Missouri’s woods and wildflowers”—Nan Weber worked throughout her life to beautify Missouri and promote conservation. She helped develop the statewide program *Raise Missouri from the Mud* in the late 1920s. She donated 80 acres in Wayne County to the Conservation Department for the Lon Sanders Canyon Natural History Area, and she helped acquire lands for the Mark Twain National Forest.

Weber served as state chairperson of the Conservation and Roadside Improvement Committee of the Missouri Federation of Garden Clubs. She was state president of the Federated Garden Clubs, and she helped establish the Silas Dees Azalea Wildflower Preserve and Bird Sanctuary in St. Francois County. In addition to her many conservation and beautification efforts, she also advanced Missouri’s child welfare and public health. In 1939–1942, she was included in *The International Blue Book (Who’s Who in the World)*, a distinction she shared with Helen Keller and Eleanor Roosevelt.



## Donald E. Wooldridge

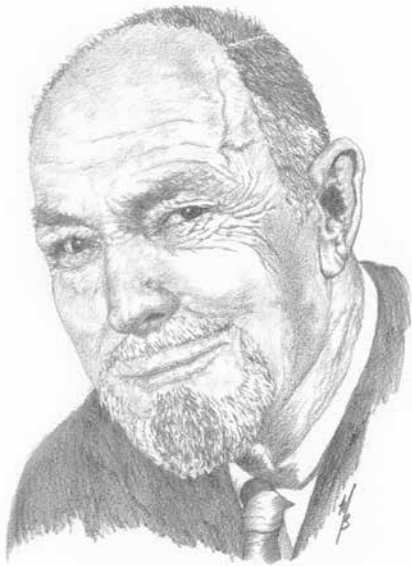
Inducted July 1990

Don Wooldridge began his career with the Department in 1949. For the next 28 years, his photographs graced the *Missouri Conservationist* magazine and other Department publications. Much of the honor the Department’s publication program received during that time was due to his talent and the artistry of his photographs. In addition to supporting Department publications, Don’s photographs appeared in almost every major outdoor magazine, in many books, and were exhibited by the Missouri Council of the Arts. He was also a regular contributor of conservation articles to outdoor magazines and coauthored a book with Bill Nunn, *Eye of the Eagle: The Outdoor Photography of Don Wooldridge*.

Wooldridge not only helped people appreciate the beauty and importance of natural Missouri, he walked and talked the conservation message. He had a talent for public relations, and he helped opponents understand and then support the Department’s position during controversies. As a landowner, he managed his 90-acre farm for wildlife.



## Conservation Hall of Fame



### C. Dan Saults

Inducted July 1990

As owner and editor of the *Knob Noster Gem*, Dan Saults backed the campaign for Amendment 4 in 1936 to remove the Department from political control.

In 1947, Saults started with the Department as a *Conservationist* staff writer. He quickly rose through the ranks and became assistant director in 1958.

As chairman of the Regulations Committee, Saults worked to make regulations simpler and easier to understand. "We should permit as much public use of wildlife resources as is consistent with the state of such resources," he said. Further, "In essence, we feel it is best to keep seasons as long as possible, and to be first restrictive on methods, next on limits, and to approach shortened seasons as a last resort."

Saults was an active spokesman for conservation causes in Missouri and nationally for more than 50 years.

After his death, the Ozark Writer's League established the Dan Saults Writing Award to honor his memory. A year later the Conservation Federation of Missouri awarded him the National Wildlife Federation's Conservation Award.



### Paul Q. Tulenko

Inducted July 1990

Paul Tulenko was an "idea" person who exerted major influence on Missouri conservation for more than 25 years. He joined the Department in 1940 as a draftsman and statistician in the Federal Aid Section. He rose to become state project leader in 1943 and chief of the Game Section in 1946. He also served as federal aid coordinator and landscape designer.

Tulenko promoted many issues before they were accepted practices, such as creel and length limits for black bass, sharecropping on Department areas, the combination of lake development and public hunting areas, an intensive land donation program, and reorganization of several Department units for more efficiency, all of which were eventually implemented. He had broad interests, many of which were reflected in the Department's Natural History Section.

Tulenko, a trained landscape architect, designed the grounds and plantings of the Conservation Department headquarters in Jefferson City, which had previously been a pasture. Under Tulenko's direction, the area was planted with native trees and shrubs, five ponds were built, and a series of trails were created.

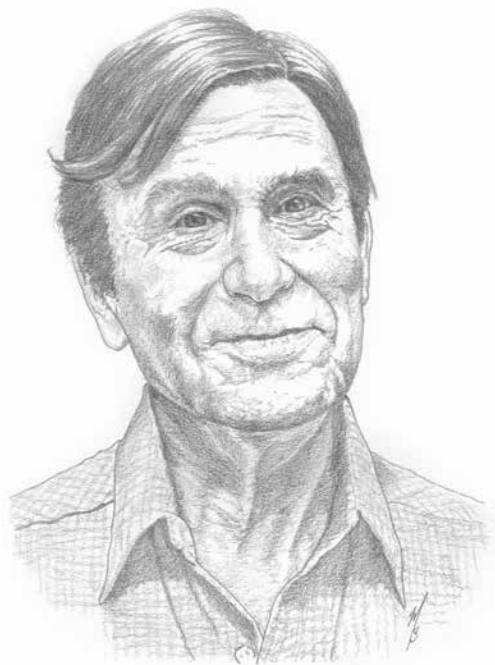


## Julian A. Steyermark

Inducted July 1990

Julian Steyermark, whose botanical career began in the early 1930s, made a major impact on Missouri's natural history sciences and shaped the Department's Natural Heritage Program. In 1935, Steyermark collaborated with fellow botanist E.J. Palmer to publish *An Annotated Catalogue of the Flowering Plants in Missouri*, the first comprehensive inventory of the state's flora and distribution of plants. His subsequent research led to many technical papers providing baseline data on the state's vegetation and flora, including his *Spring Flora of Missouri* in 1940 and the two-part *Studies of the Vegetation of Missouri* in 1940.

This culminated in his monumental book *Flora of Missouri* in 1963. Steyermark also took meticulous field notes, and his annotated maps, along with the *Flora*, became the basis for the state's Natural Heritage Program. Steyermark was a strong voice for conservation, publishing many articles about issues such as poor forestry practices in the Ozarks during the 1930s and the ecological impact of dams in southwest Missouri. The Department named Steyermark Woods Conservation Area near Hannibal after him.



## Alexander Timon Primm III

Inducted July 1991

Timon Primm spent his career with the *St. Louis Post-Dispatch*, retiring as senior vice president in 1979. A dedicated conservationist, Primm championed the work of many natural resource organizations, including the Missouri Botanical Garden and The Nature Conservancy. He served on the Conservancy's national board of governors and was chairman of the Missouri chapter. He worked closely with the Missouri departments of Conservation and Natural Resources to establish the Missouri Natural Heritage Inventory, a database that drives the state's land protection work by providing critical information to companies and individuals about Missouri's rare and endangered species and natural communities.

Primm received many honors and awards for his conservation efforts. The Garden Club of America gave him its Conservation Award for the Central District in 1980, and The Nature Conservancy granted him its Oak Leaf Award in 1981. The Conservation Federation of Missouri named him Conservationist of the Year in 1982, and he received the Sol Feinstone Award in 1983.



## Conservation Hall of Fame



### Edward D. "Ted" Jones

Inducted July 1991

Ted Jones, founder of Edward Jones Investments, had a lifelong interest in conservation. He converted a badly eroded farm in Callaway County into a wildlife paradise through tree and shrub plantings, terraces, ponds, strip cropping, and food plots. He bought a tree planter in the mid-1950s to expedite tree planting on his land and then donated it to the Conservation Department as the first "private land" mechanical tree planter. The Department later acquired many more for use by landowners on reforestation projects.

The Missouri River State Trail, now the Katy Trail State Park, is in large measure the creation of his foresight, energy, and generosity. During the last 10 years of his life, Jones contributed more than \$2 million toward its development and spent countless hours in public meetings and hearings, appeared before the General Assembly, and held numerous strategy meetings with proponents before it became a reality.



### Charles W. Schwartz

Inducted July 1992

Paintings, drawings, and movies about wildlife won Charles Schwartz widespread acclaim during his 39-year tenure with the Conservation Department. Early in his career he authored a meticulously researched book about prairie chickens, published in 1944. He contributed pencil and pen-and-ink drawings to illustrate the original edition of Aldo Leopold's *A Sand County Almanac*. Schwartz and his wife, Libby, collaborated on *The Wild Mammals of Missouri*, which remained the all-time bestseller for the University of Missouri Press for decades.

Schwartz won many awards for wildlife films including his 1950s collaboration with Jack Stanford called *Bobwhite through the Years*, which won the Grand Medal at the International Sports Film Festival. One of his most ambitious works was a series of murals in the Conservation Department's Jefferson City headquarters, depicting the evolution of wildlife in Missouri from presettlement times to the present.

Schwartz was also one of the authors of the Design for Conservation, which culminated in the Department's successful one-eighth of 1 percent sales tax campaign for conservation in 1976.



## Ray A. Heady

Inducted July 1992

Ray Heady was the first full-time outdoors editor of the *Kansas City Star*, where he served in that capacity from 1959 to 1973. He was a tireless public servant who was committed to good government, but most of all he was an outdoor writer who brought the beauty and tranquility of the outdoors to countless people who never went fishing or hunting. He was a champion of environmental issues long before the environmental movement was popular.

Among the many honors bestowed on Heady were the Outstanding Conservation Award of *Field and Stream's* Sportsmen's Conservation Club, the Sears Roebuck Foundation National Wildlife Federation Award, the Jade of Chiefs Award (the highest honor of conservation writing given by the Outdoor Writers Association of America), and a citation for "best newspaper writing on the outdoors" by the Bureau of Sport Fisheries and Wildlife.



## Leonard Hall

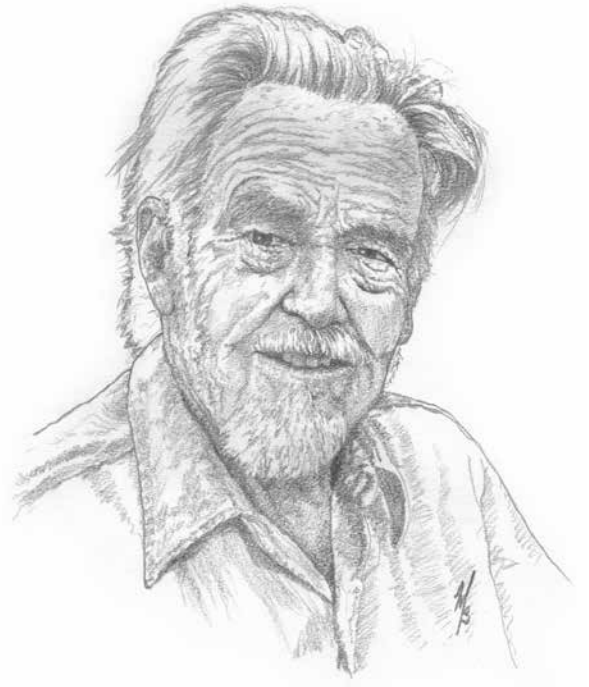
Inducted July 1993

Between 1943 and 1961, Leonard Hall's columns in the *St. Louis Post-Dispatch* transported many of the paper's regular readers to his Possum Trot Farm in Caledonia. The columns eventually earned him speaking engagements, where he delivered the conservation message to thousands nationwide.

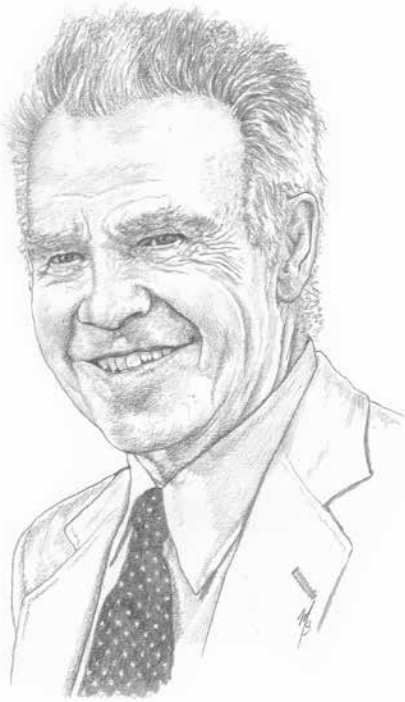
Hall's first book, *Possum Trot*, is a collection of his columns. He also wrote other books on conservation, including *Stars Upstream: Life along an Ozark River*. His byline appeared in many national publications such as *Life*, *Field and Stream*, and *Outdoor Life*.

After testifying in Washington, D.C., in the late 1950s on conserving Ozark streams, he floated the Current River with Interior Secretary Stewart Udall. These efforts were instrumental in the preservation of the Current and Jacks Fork rivers as the Ozark National Scenic Riverways.

The Missouri Conservation Commission named him Master Conservationist in 1949, and the Conservation Federation of Missouri honored him as its first Conservationist of the Year in 1965. In 1991, the Audubon Society named him Environmentalist of the Year.



## Conservation Hall of Fame



### Charlie H. Callison

Inducted July 1994

Charlie Callison worked for the Conservation Department from 1941 through 1947, and served as editor of the *Missouri Conservationist*. He then worked as the executive secretary of the Conservation Federation of Missouri. In the 1950s he served as conservation director of the National Wildlife Federation. Callison wrote several books, including *Man and Wildlife in Missouri*. He was instrumental in organizing the Environmental Defense Fund, and he successfully campaigned for clean water programs.

Callison worked for the National Audubon Society from 1960 until retirement in 1977. He became executive vice president in 1966. During his tenure, the organization grew from a group of 50,000 bird watchers into a significant grassroots force of nearly 400,000 wildlife advocates.

In Missouri in 1976, Callison helped pass the one-eighth of 1 percent sales tax to fund conservation. He founded and operated the Public Lands Institute, an organization that monitors federally owned public land, and led the formation of the Missouri Parks Association. Callison also served the National Wildlife Foundation as an executive and headed the National Resources Council of America.



### Edgar W. Denison

Inducted July 1994

Edgar Denison was known for his broad-based botanical knowledge, his speech and manners (which never quite lost their European charm), and his outspoken opinions. He had a reverence for life in all its forms—from lowly trilobites to wildlife, domestic animals, and of course, the native plants he knew and nurtured.

In 1972, Denison donated text and illustrations for his book, *Missouri Wildflowers*, to the Conservation Department. Since then, it has gone through many editions and reprints. Among his many outstanding education efforts was a natural history museum at Taum Sauk Mountain that Denison established when he was an employee at Union Electric. His extensive collection of original wildflower paintings and photographs is now in the possession of the Missouri Botanical Garden.

Edgar Denison was born in Stuttgart, Germany, and learned to love wildflowers while hiking in the Alps. He passed away in 1993 at the age of 88. One of his last contributions was a two-part guide to identifying Missouri oaks, which he authored for publication in the *Missouri Conservationist* magazine.



## Doris J. “Dink” Keefe

Inducted July 1996

Doris “Dink” Keefe of Jefferson City worked full-time as a volunteer in the 1970s to secure an earmarked addition to the Missouri state sales tax. Working out of the Conservation Federation of Missouri office, she helped organize and manage the large number of volunteers who strove for passage of a soft-drink tax and, later, an addition to the sales tax. She supervised a small but effective group of workers who mailed out, organized, checked, and counted the petitions and all the names on them during the early phases of the campaign. This successful effort (voters passed it in 1976) has provided millions of dollars for the conservation of forests, fish, and wildlife in Missouri, and it has become a major component of the Conservation Department’s budget.

Doris, who died in 1995 at the age of 71, was Conservationist of the Year in 1975 and received the “Ping” Bode Award from the Mid-Missouri Conservation Society in 1976. She also received the National American Motors Conservation Award in 1980.



## Jack A. Stanford

Inducted July 1997

Few people in the United States have been as closely identified with a wildlife species as Jack Stanford. He was literally “Mr. Quail” for much of the 35 years he worked as a wildlife biologist for the Conservation Department. Stanford was a pioneer in the field of wildlife research.

In the 1950s, Stanford both authored a book, *Whirring Wings*, and helped produce a film with Charles Schwartz, *Bobwhite through the Years*, based on that book. Both book and film were recipients of honors from national and international wildlife organizations. His excellent photos of quail and quail hunting delighted many audiences.

Stanford had degrees in forestry, wildlife management, and biology from the University of Missouri and the University of Michigan. During his years with the Conservation Department, he garnered awards from fellow biologists, the Conservation Federation of Missouri, the Sears Roebuck Foundation, the National Wildlife Federation, and Quail Unlimited.



## Conservation Hall of Fame

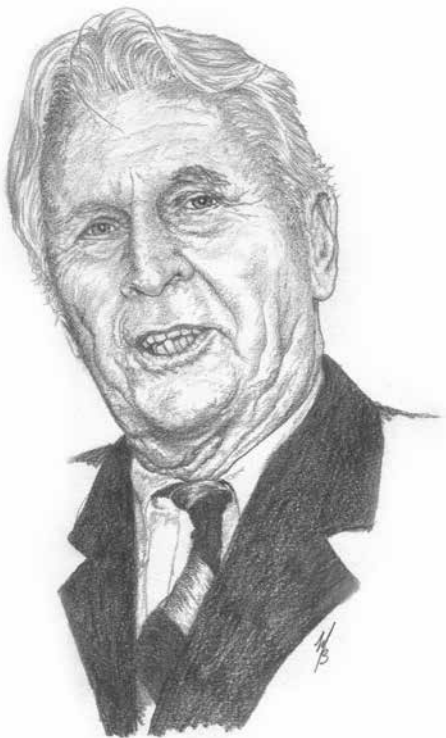


### Michael C. Milonski

Inducted July 2000

Former Assistant Director Michael “Mike” Milonski was a leader of the campaign that resulted in passage of the one-eighth on 1 percent conservation sales tax in 1976. He championed hiring minorities and upgrading both the salaries and skills of conservation agents.

Milonski received his Bachelor of Science and Master of Science degrees in field zoology from the University of Missouri. He joined the Conservation Department in 1958 as manager of the state portion of Swan Lake National Wildlife Refuge, where he worked with waterfowl and other wildlife. He was named assistant director in 1976 and recruited many of the biologists who later became the supervisors of the Conservation Department. He retired from the Department in 1980. He was considered one of the pioneers in the field of waterfowl management and did early work on waterfowl depredation in Manitoba, Canada. During his career, Milonski received many conservation awards, including the E. Sydney Stephens Award, Missouri’s top professional wildlife honor.



### Thomas S. Baskett

Inducted July 2001

Thomas Baskett was an exceptional force in the conservation movement in Missouri and the nation as a teacher, researcher, writer, editor, and administrator. He spent most of his career as the leader of the Missouri Cooperative Wildlife Research Unit for the U.S. Fish and Wildlife Service.

As a professor at the University of Missouri–Columbia, Baskett administered one of the strongest and most successful cooperative wildlife research programs in the nation. Baskett published 80 scientific papers, several books, and guided students in publishing 40 other papers on wildlife management. He advocated using careful science as a basis for resource decisions. He was the recipient of many honorary memberships and awards, including the Wildlife Society’s Aldo Leopold Memorial Award for distinguished service to wildlife conservation and was honored as a Master Conservationist in 1985.

Born in Liberty, Mo., Baskett received a B.A. in biology from Central Methodist College in Fayette, a M.S. in zoology at the University of Oklahoma, and a Ph.D. in zoology at Iowa State University.



## James F. Keefe

Inducted July 2002

James Keefe worked for the Department for more than 36 years. He headed the former Information Section from 1958 through 1985, where he was editor of the *Missouri Conservationist* magazine for 28 years. His greatest contribution to conservation was his editorship of the magazine, with which he shaped the conservation conscience of the public and, to a great extent, the Department. During his tenure, the magazine grew in monthly circulation from 20,000 to nearly 400,000.

Keefe was one of the major players in 1976 for the one-eighth of 1 percent sales tax campaign. He worked behind the scenes to complement the work of his wife Doris, better known as “Dink,” who managed the successful volunteer effort to establish the tax.

Keefe served on the Department’s Regulations Committee for many years. He authored the Department’s history, *The First 50 Years*, and many other publications. The Outdoor Writers Association of American honored him in 1980 with its highest award, and in 1983 he was honored with the I.T. “Ping” Bode Distinguished Service Award.



## Max C. Hamilton

Inducted December 2007

Renowned for his achievements in conservation and beloved for outdoors-related writing, Max Hamilton, a long-time nature lover, was instrumental in the restoration of white-tailed deer and turkey in Missouri and ruffed grouse to north-central Missouri. He was equally dedicated to conservation measures on his own property, where he developed wildlife habitat by planting native plants and trees to create windbreaks, nesting areas, and field borders. He also constructed ponds and marshes and enrolled his farm in timber management.

He helped found the National Wild Turkey Federation’s first Missouri chapter. For nearly 50 years, he was the outdoor editor for the *Chillicothe Constitution-Tribune* and contributed his weekly columns as the newspaper’s outdoor editor emeritus for years following his retirement. President of the Missouri State Outdoor Writers Association, he also received the Conservation Federation of Missouri’s Wildlife Conservationist of the Year Award, as well as numerous other awards and recognitions. Hamilton passed away in 2006.



## Conservation Hall of Fame



### Earl P. Coleman

Inducted December 2007

Earl Coleman's Conservation Department career began in 1948. During his more than 34 years as a conservation agent, he worked to make enforcement of *The Wildlife Code of Missouri* more effective and efficient by improving training and equipment for conservation agents. He also worked to make the agency more inclusive by supporting the hiring of the first female conservation agent trainee in 1975.

While he was conservation-agent training officer, he expanded the training program, which many universities and colleges soon adopted and offered for college credit. The expanded training program also served as a model for other state conservation agencies. He facilitated the building of a barracks and firing range for trainees.

As chief of the Conservation Department's Protection Division, he worked hard to ensure that agents had state cars and made two-way radios available to them in their cars, offices, and homes to facilitate communication and avoid unnecessary travel. Coleman left a legacy of better wildlife protection for Missouri and for conservation departments throughout the nation.



### Charles E. "Ted" Shanks

Inducted May 2010

During his 21-year career with the Conservation Department, Ted Shanks served as game biologist and chief of the Game Division. He studied the giant Canada goose and contributed to restoration of that species in Missouri. His studies of wetland ecology laid the theoretical groundwork for the Show-Me State's wetland management program, and he was active on the Mississippi Flyway Council for many years.

Concrete evidence of Shanks' work can be found at 22 state-owned managed waterfowl areas covering more than 80,000 acres in Missouri. He helped develop waterfowl hunting procedures at Missouri's first public managed wetland, Fountain Grove Conservation Area, as well as at Duck Creek Conservation Area and Swan Lake National Wildlife Refuge. He was instrumental in developing Schell-Osage Conservation Area. One of Missouri's earliest waterfowl areas, located on the Mississippi River, bears his name—the 6,705-acre Ted Shanks Conservation Area.

The areas spawned by his pioneering work continue to be havens for migratory waterfowl, shorebirds, eagles, and songbirds, not to mention hunters, birdwatchers, trappers, photographers, and other nature enthusiasts.



## George K. Brakhage

Inducted August 2011

George Brakhage had a 40-year career in conservation, over half of which was spent in Missouri working in various positions in state and federal government, as well as in the private sector. Notable achievements while working for the Conservation Department include establishment of Duck Creek Wildlife Area in the 1950s, the development of an initial understanding of the nesting ecology of resident Canada geese in the early 1960s, along with development of waterfowl habitat management plans for the state. He spent time with the U.S. Fish and Wildlife Service, where he played a pivotal role in successfully allocating a very contentious Canada goose harvest, established steel shot requirements for waterfowl hunting, and authored a national waterfowl management plan.

In the final phase of his career, Brakhage returned to Missouri and worked for Ducks Unlimited to assist with fundraising efforts for waterfowl habitat conservation. He retired in 1992 but continued to serve conservation through numerous volunteer efforts until shortly before his passing in 2009.

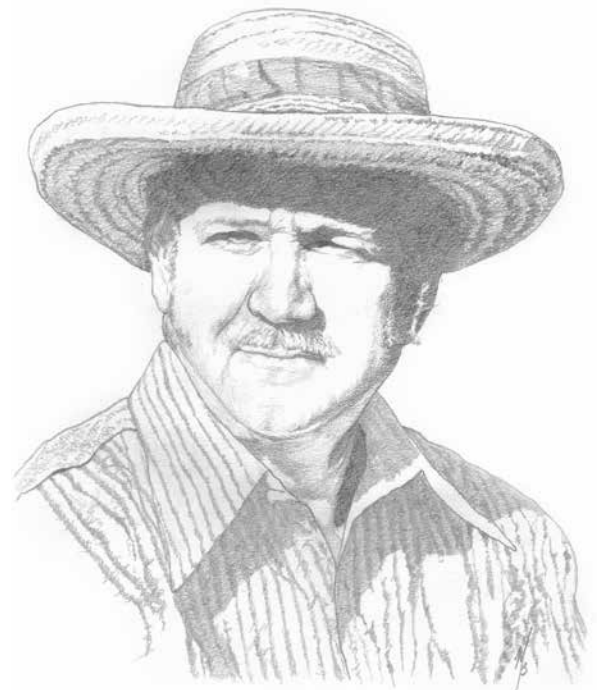


## Donald M. Christisen

Inducted August 2011

Donald Christisen began his 42-year career with the Department in 1942. In 1947, he began to monitor prairie chickens and, building on the work done by Charles Schwartz, quickly identified the ominous decline in population. It became apparent that a more aggressive approach was needed to preserve remnant prairies as well as the native birds.

Christisen, along with Bill Crawford, proposed the formation of the Missouri Prairie Foundation. In the following years, Christisen continued to play a key role in prairie land acquisitions and prairie chicken restoration. His research regarding prairie chickens and land usage is still regarded as a key reference. He served in many capacities to sustain the principles of the Missouri Prairie Foundation, and his determination and sound leadership ensured a strong future for that organization. In addition, he served as two-time chairman of the Prairie Grouse Technical Council and received many awards recognizing his conservation efforts, including the Council's most coveted honor, the Hamerstrom Award; Wildlife Conservationist of the Year Award; and a Gulf Oil Conservation Award for Professionals.



## Conservation Hall of Fame

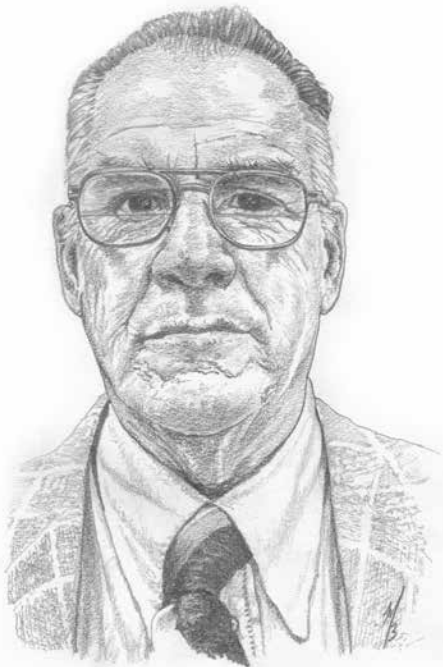


### Earl Hoyt, Jr.

Inducted April 2012

Earl Hoyt, Jr., was an engineer who turned his skills into an archery and bow hunting business. Hoyt convinced his father to join him in forming the Hoyt Archery Company in 1942. What followed were innovations in archery bow design that are still incorporated into compound bow designs today. Because of his innovative designs, American Olympic gold medalists have used his bows for many years. His Pro Medalist bows dominated the scene for four Olympic games and were soon adopted by archers from many foreign countries. In 1977, Hoyt was honored with the National Archery Association's highest award, the Thompson Medal of Honor. He and Paul Jeffries were instrumental in establishing Missouri's first archery deer season in 1946 and in founding the Missouri Bowhunters Association in 1947.

Hoyt and his wife, Ann, created a scholarship fund with the Conservation Federation of Missouri for students entering the University of Missouri School of Natural Resources. He was also a major contributor and an early inductee into the Archery Hall of Fame.



### Paul Jeffries

Inducted April 2012

Paul Jeffries began his career with the Conservation Department as a conservation agent in Ste. Genevieve County in 1948. He was promoted to the Field Service Section in 1954 due to his ability to work with private landowners, public officials, and conservation organizations to protect and improve resource management.

As a field service agent, Jeffries continued to work with citizens and quickly realized that, in order to increase and improve wildlife habitat in the state, it would be necessary to convince private landowners to improve habitat on their land. As he gained support for his private landowner wildlife initiative, he also worked with public agencies, sportsmen organizations, and others to support the effort through various forms of assistance such as seed or planting stock.

He and Earl Hoyt, Jr., were instrumental in establishing Missouri's first archery deer season in 1946 and in founding the Missouri Bowhunters Association in 1947. Paul created a scholarship fund with the Missouri Bowhunters Association for students seeking a degree in fish and wildlife management.

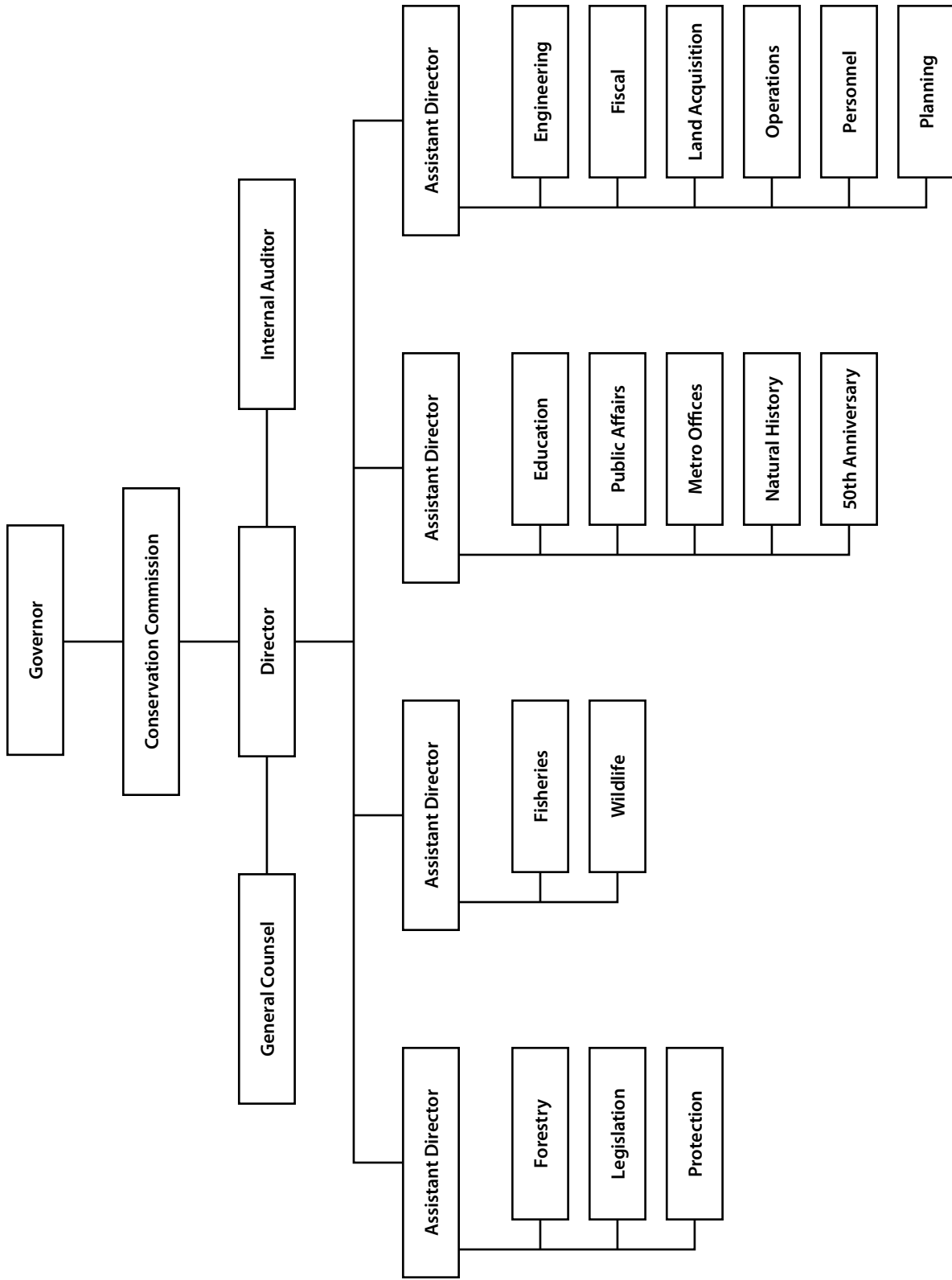


# Department of Conservation Organizational Charts

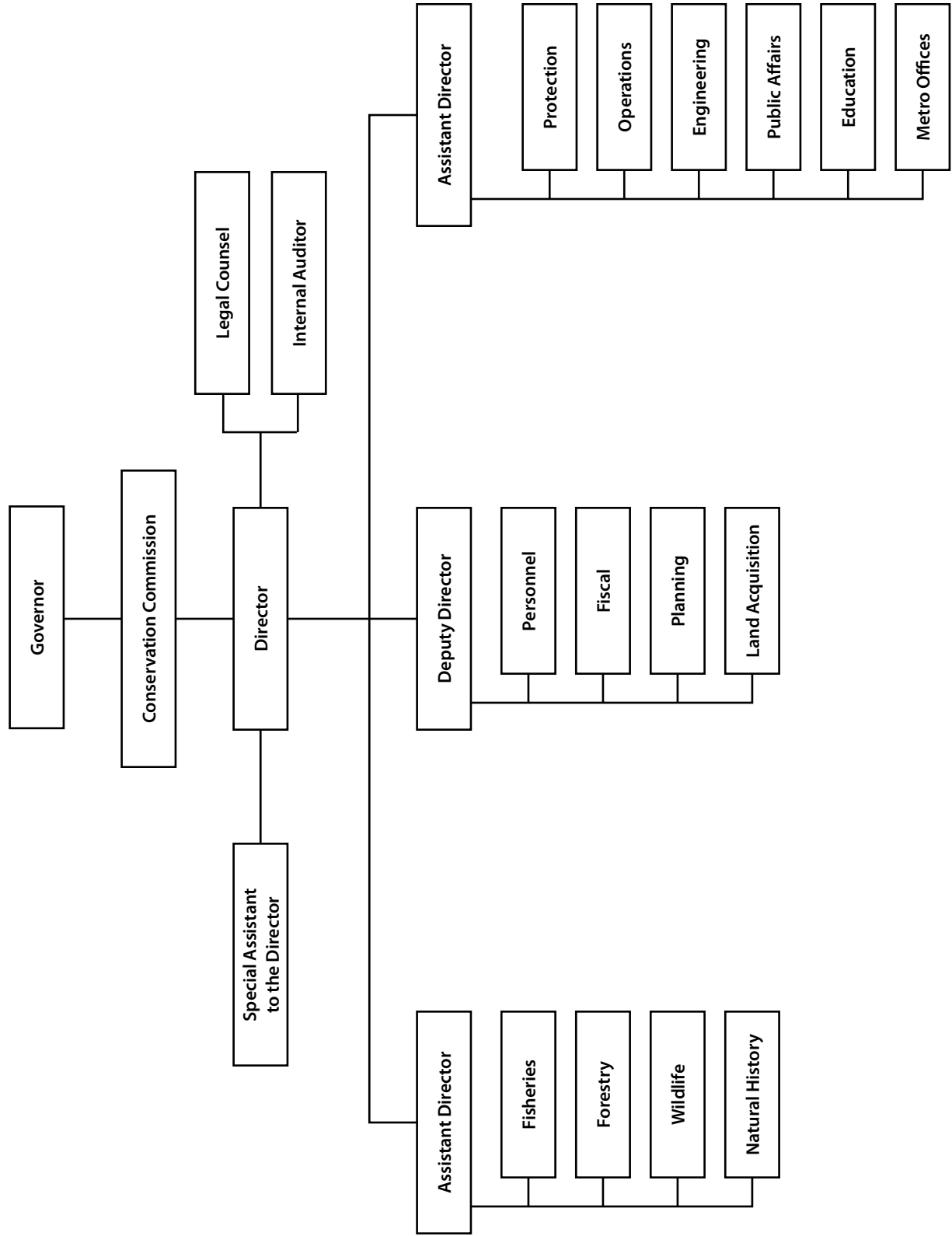


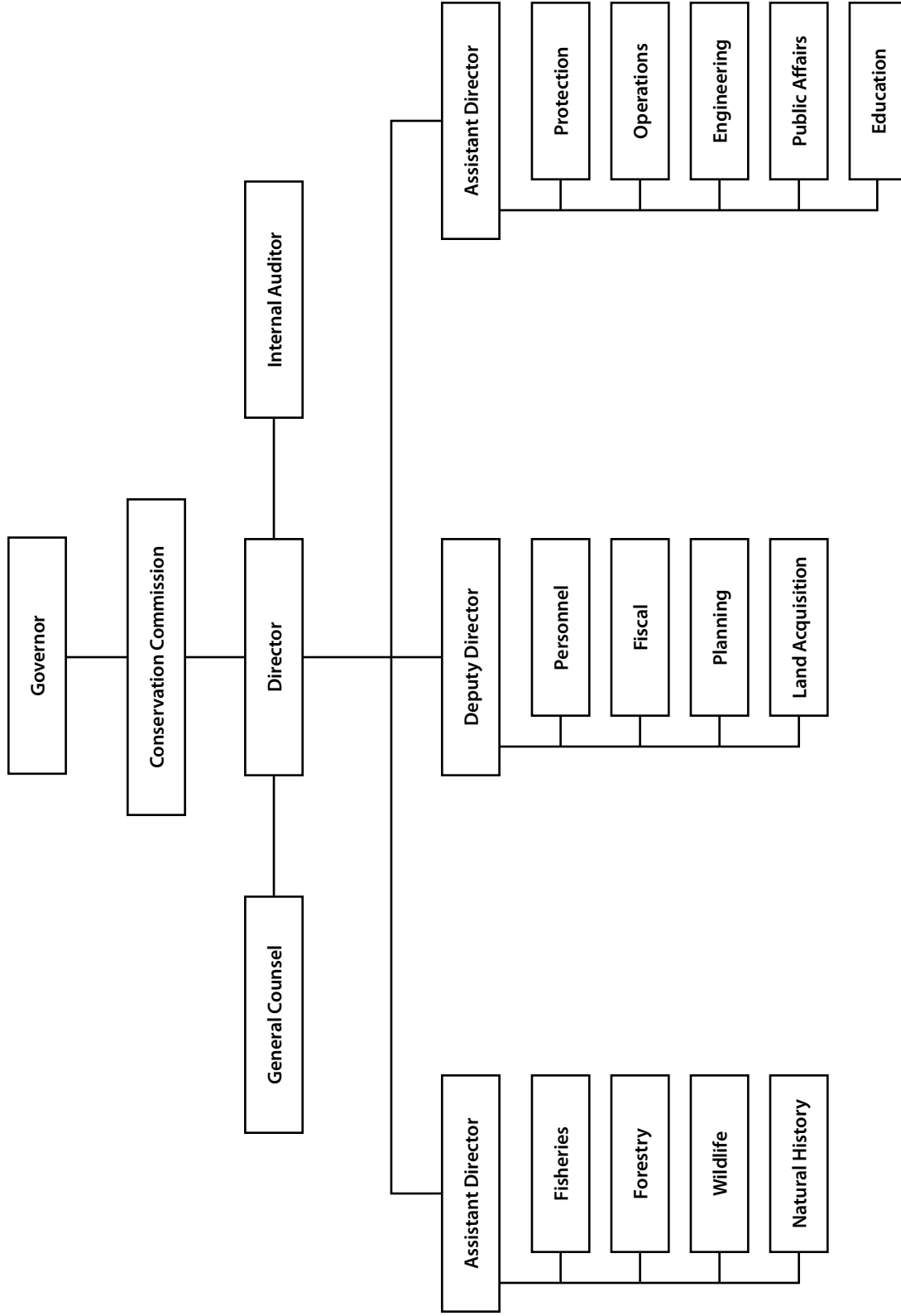
The Department's organizational structure has changed many times in the past 25 years. Some changes were minor, others involved sections being upgraded to Division status, and there were also several Department-wide reorganizations.

These restructurings reflect continual efforts to streamline the Department, with a goal to continually improve the efficiency and cost-effectiveness of the delivery of conservation in Missouri. The following 16 organizational charts reflect the Department's changes and evolution from 1987 through 2012. Refer to Keefe's *The First 50 Years*, for the Department's organizational charts from 1937 through 1986.

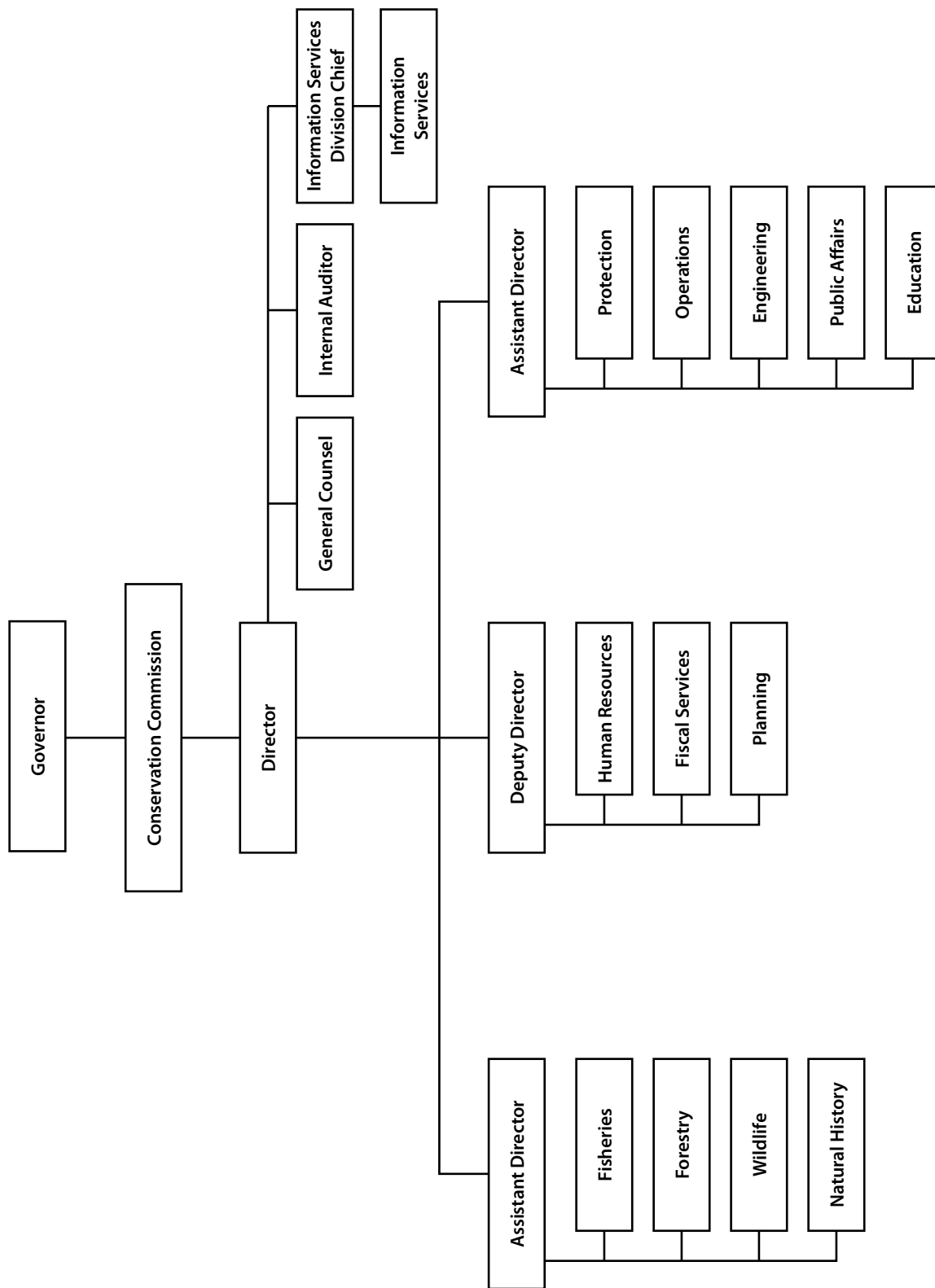


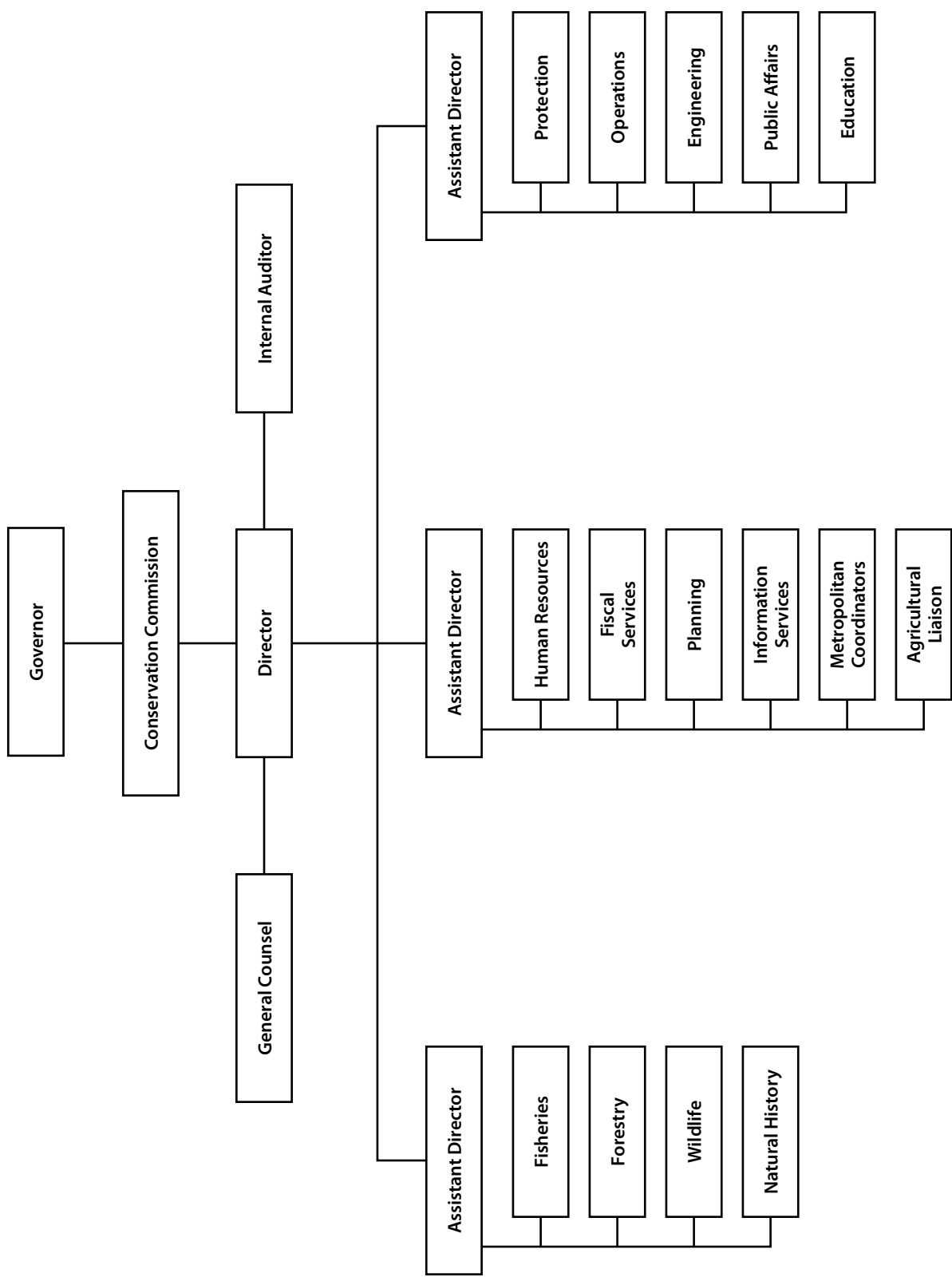




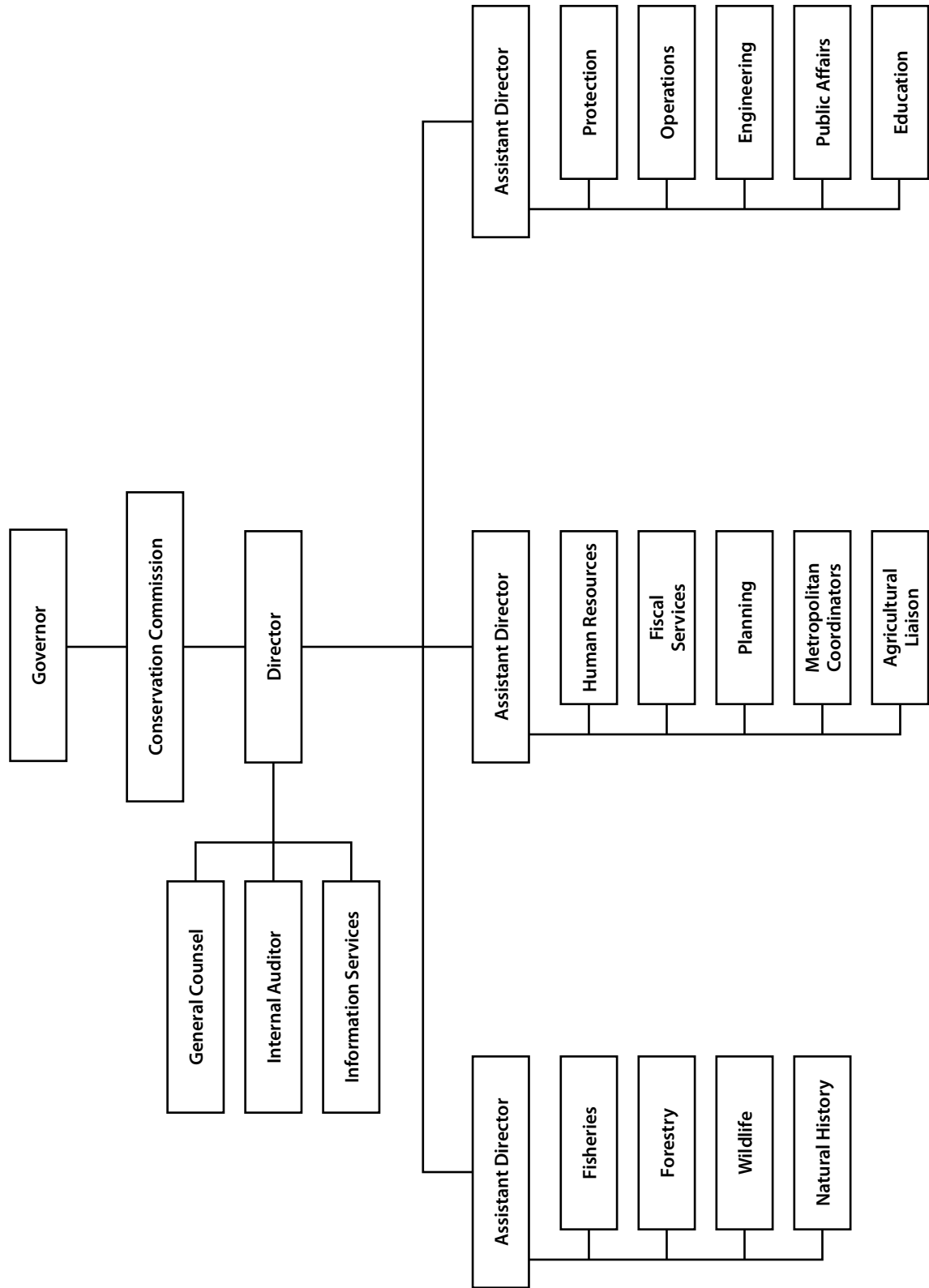


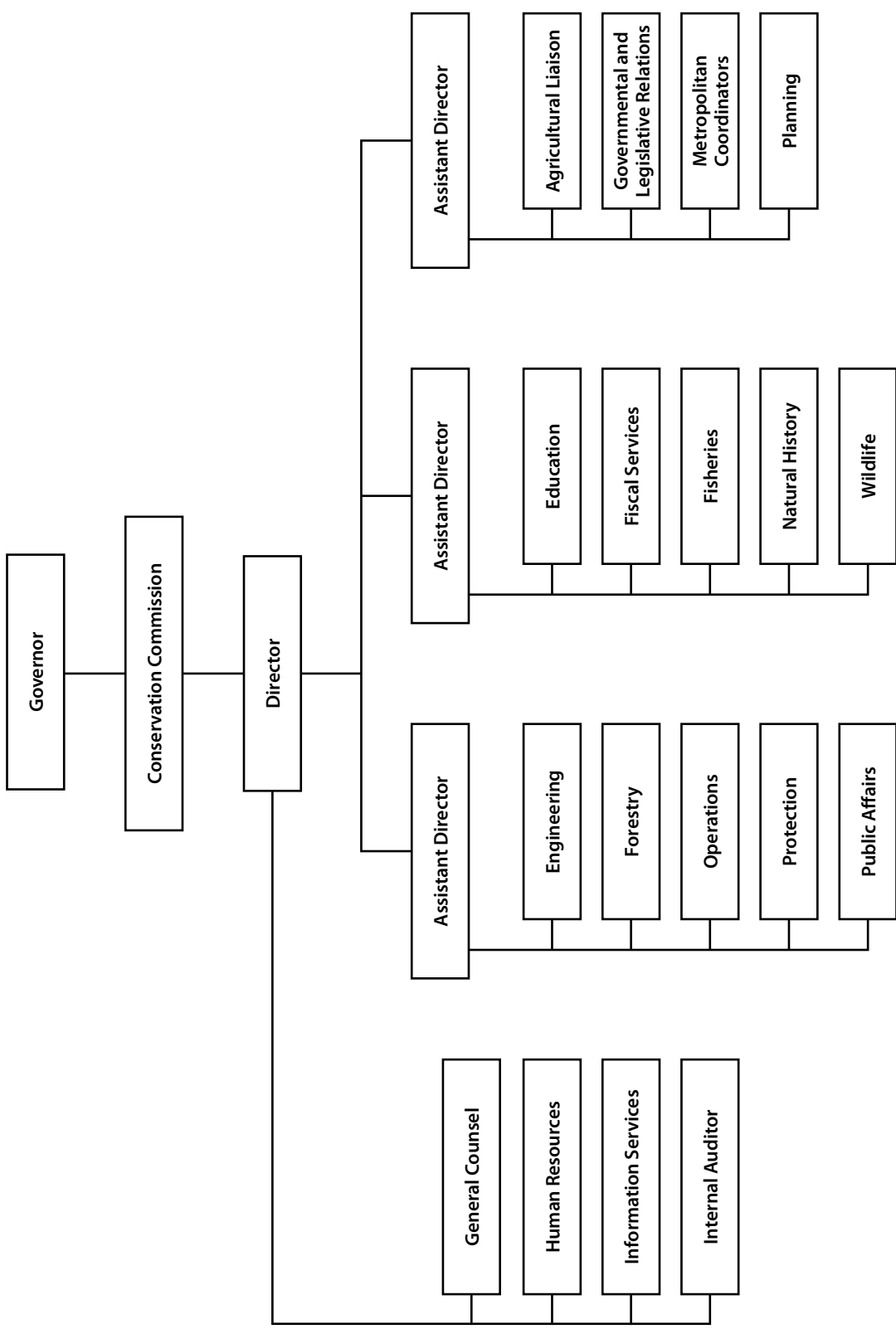




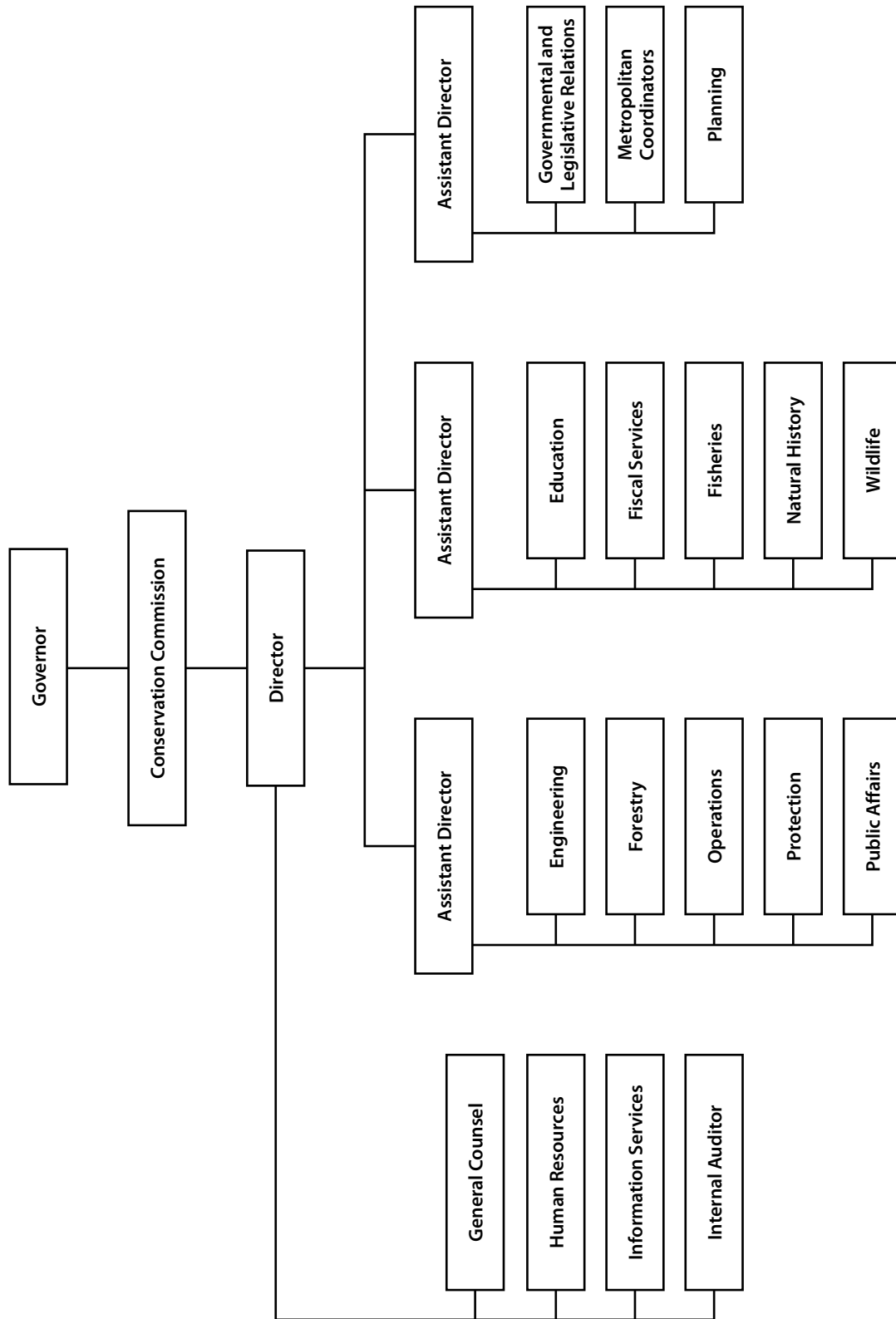


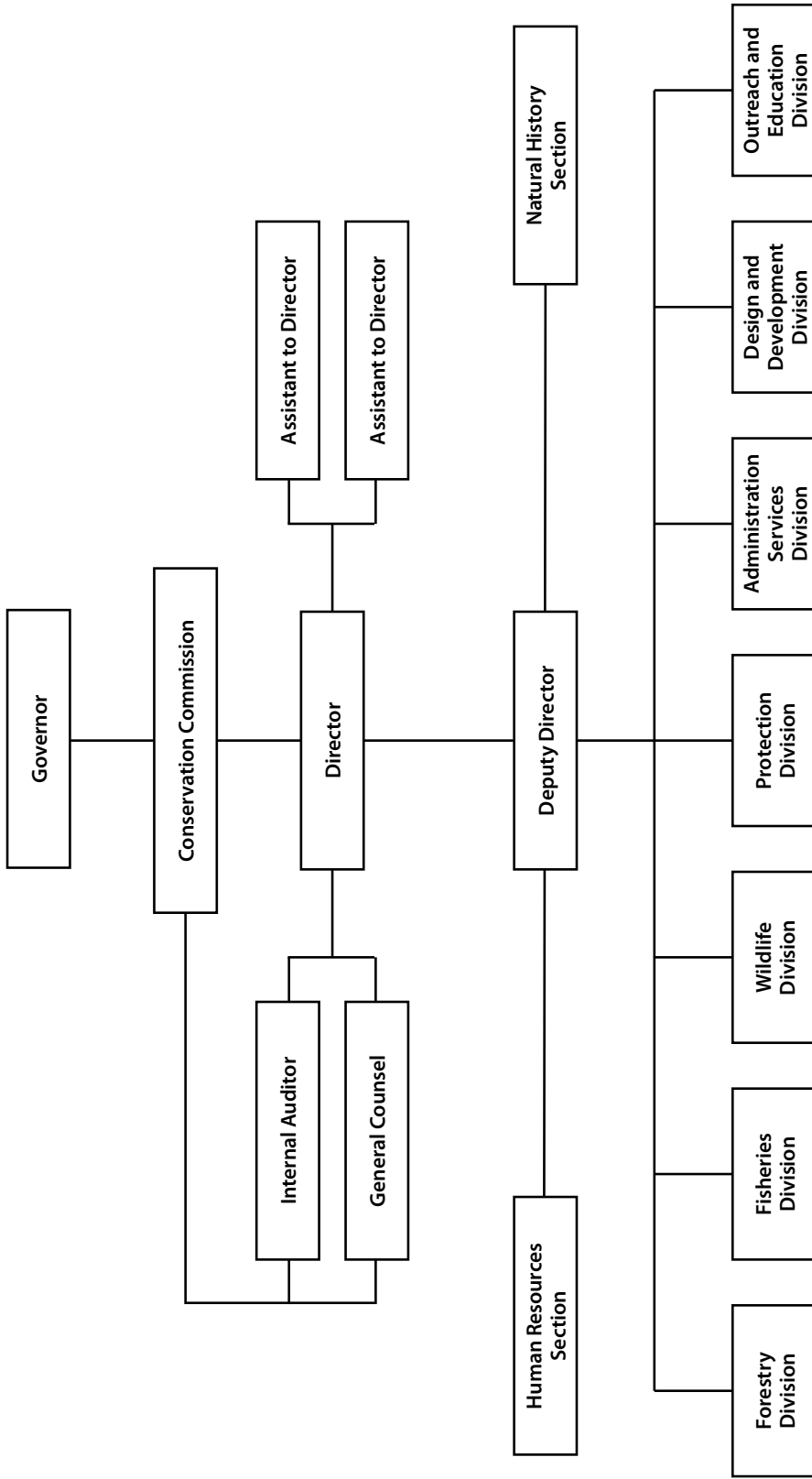




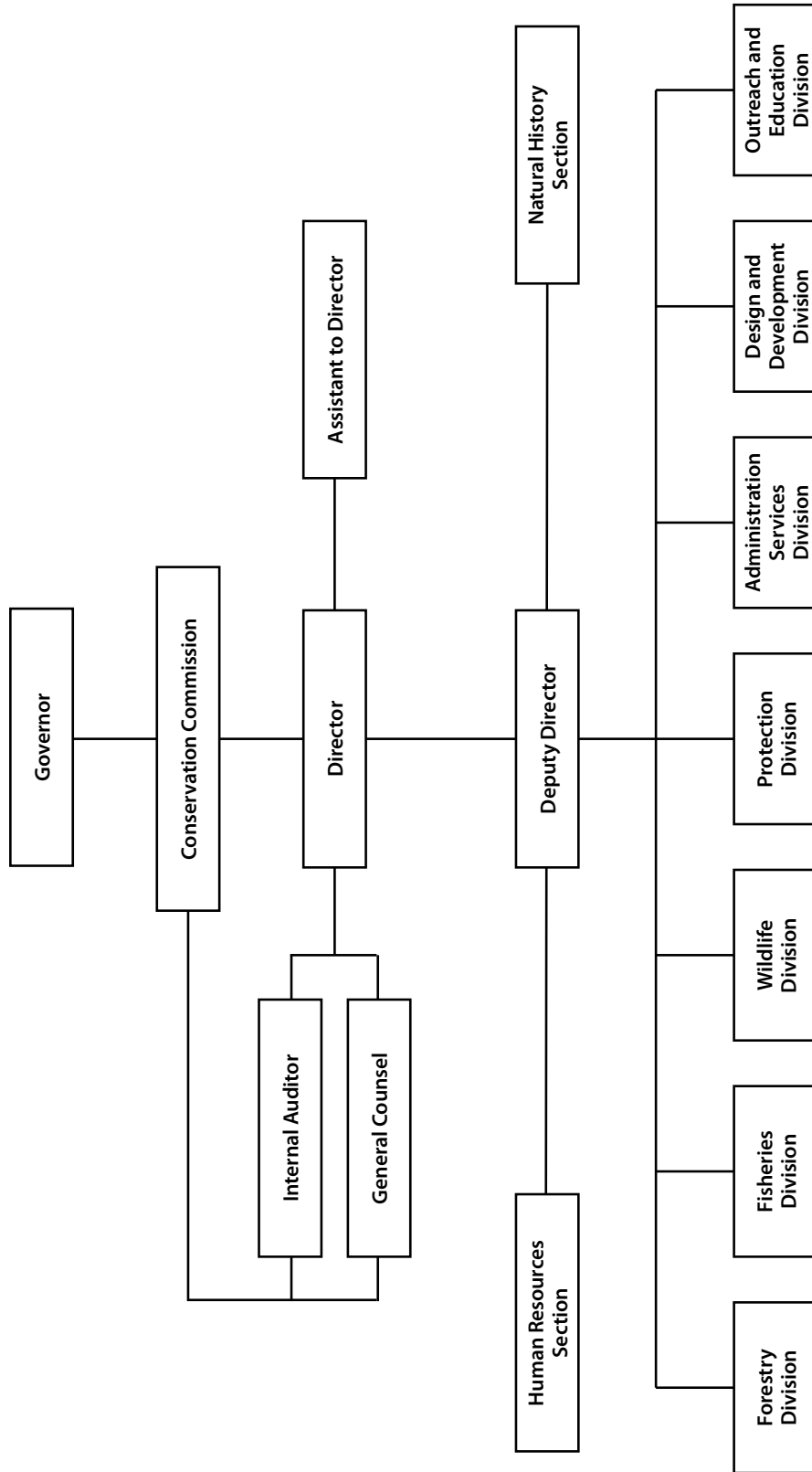


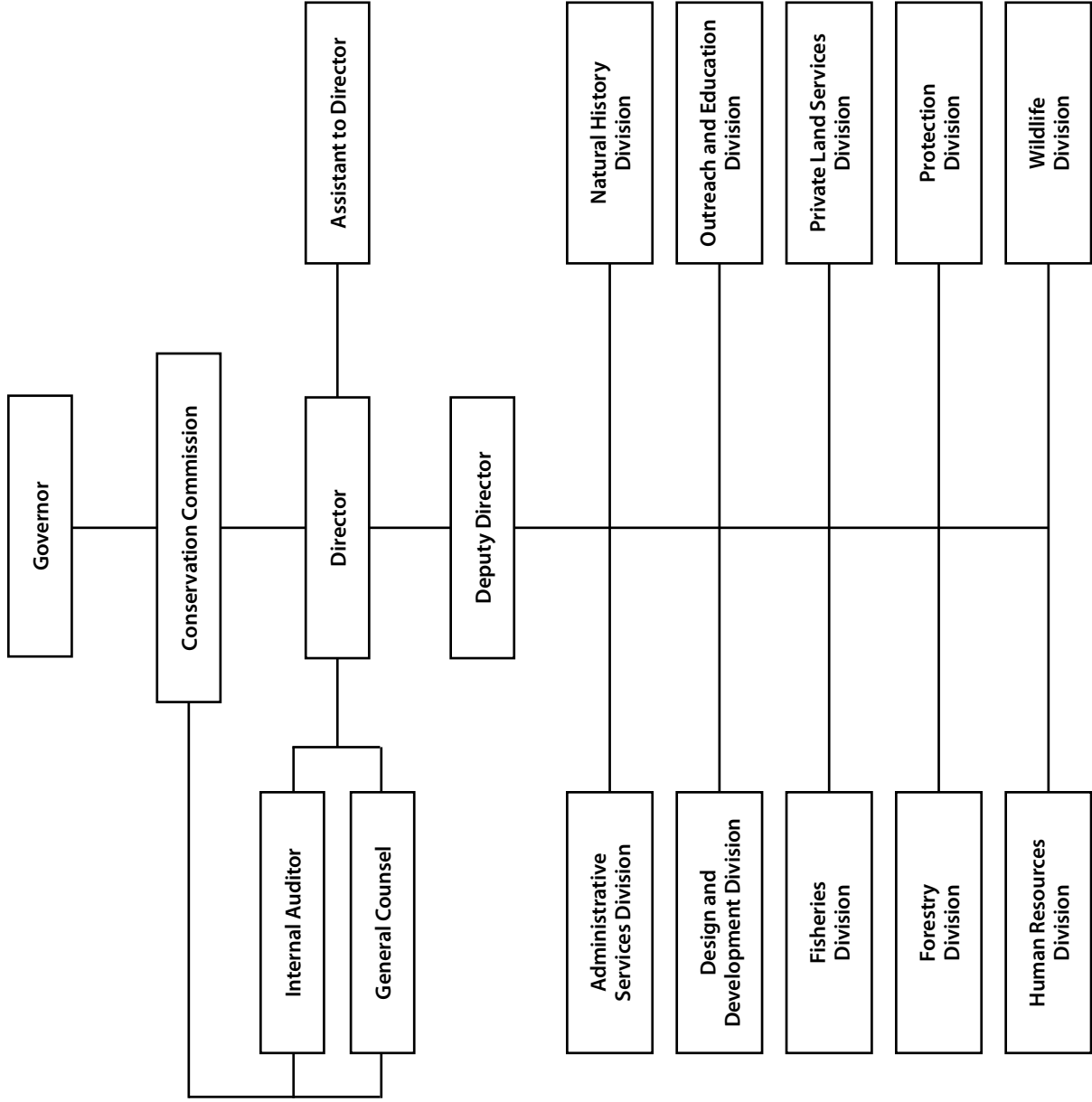




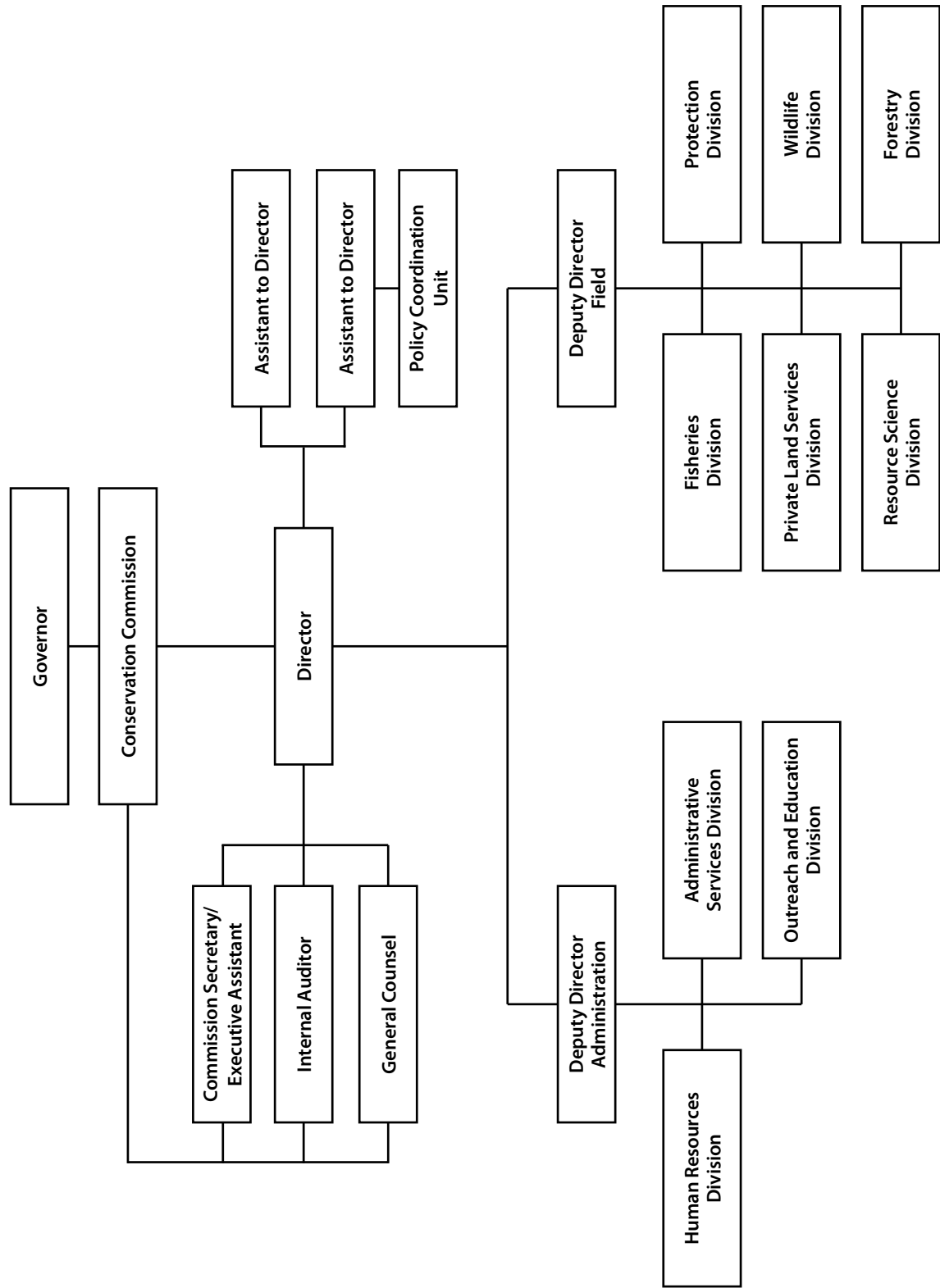


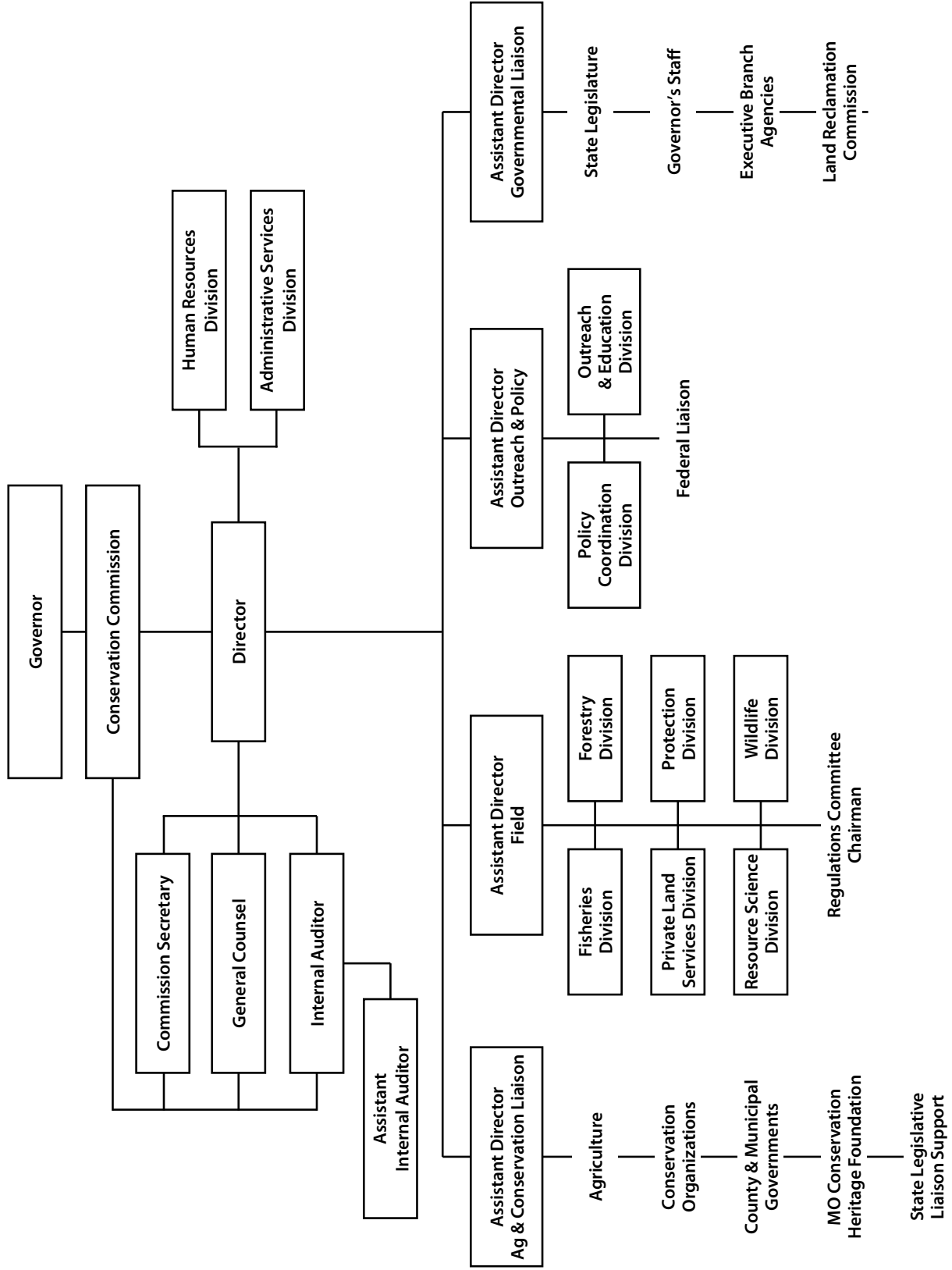




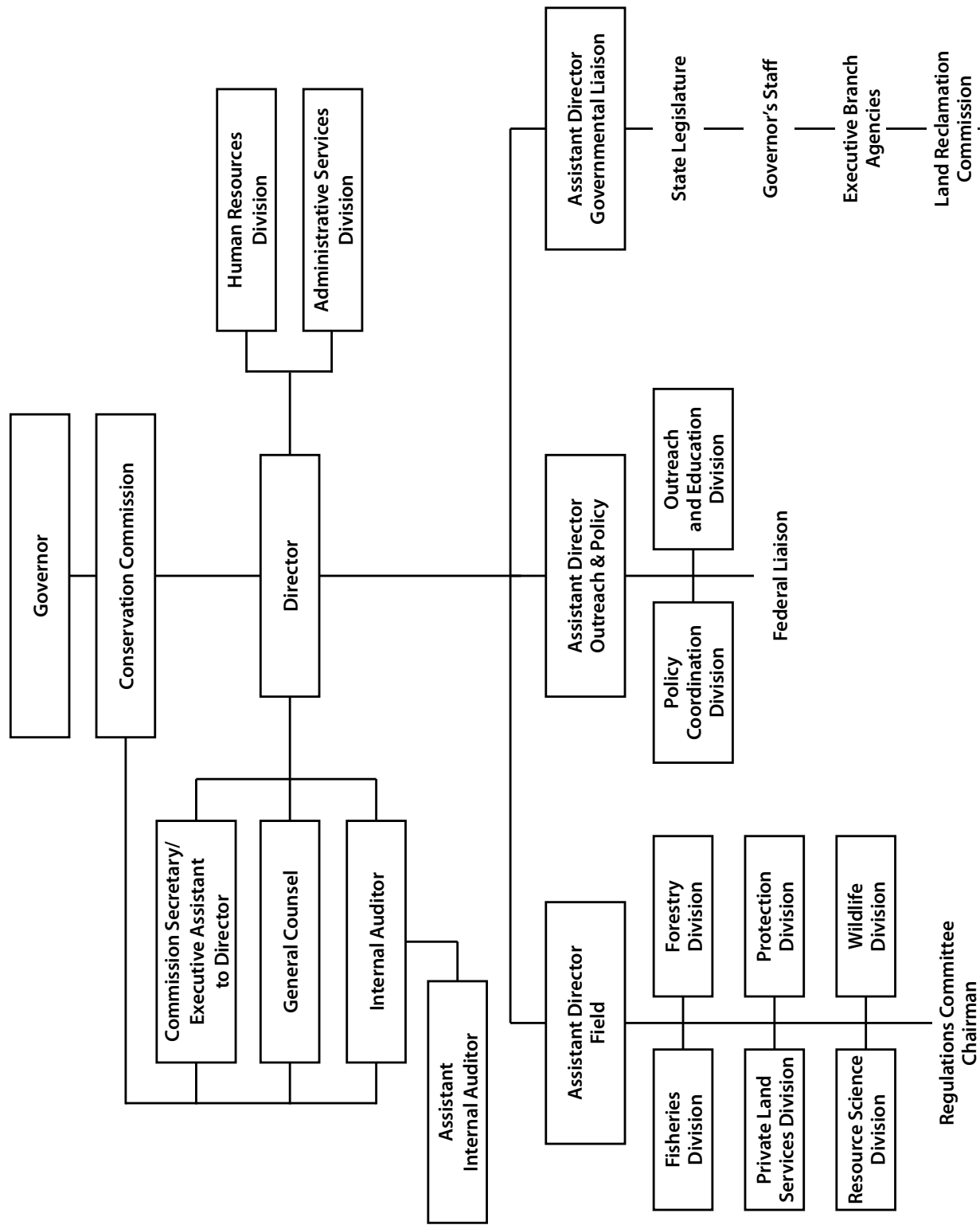


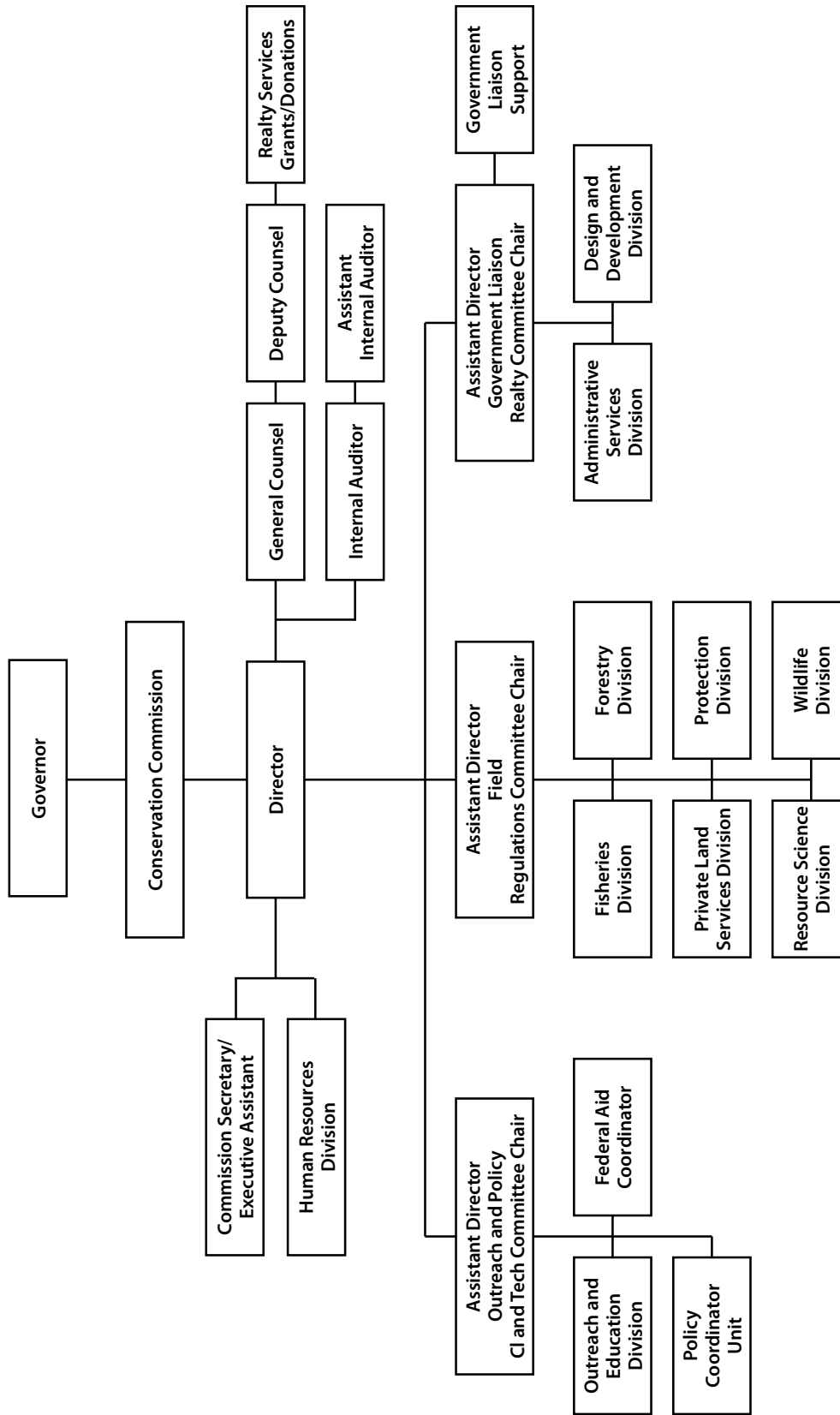




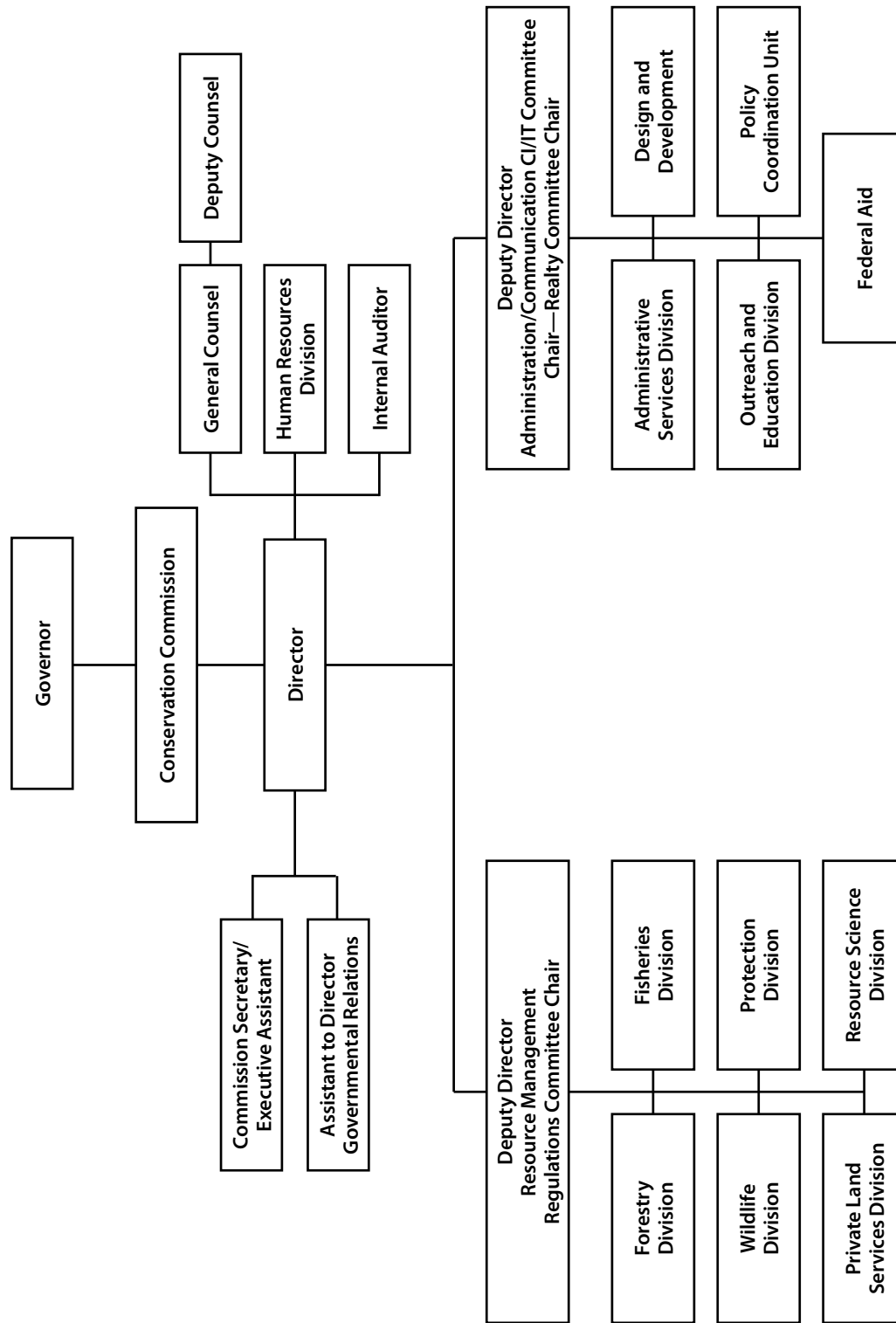














Office of the Governor  
State of Missouri  
**Proclamation**

WHEREAS, on November 3, 1936, a cold and fair day, Missourians went to the polls and created a new and nationally unique conservation system, bipartisan and constitutionally authorized; and

WHEREAS, a half century later, that system has grown to national stature and has brought credit to the State of Missouri by its professionalism and leadership; and

WHEREAS, Missourians deserve a superior conservation program for this is an outdoor state as proved by the fact that a fifth of the population actively hunts or fishes and many more engage in other outdoor activities; and

WHEREAS, Missourians have benefitted directly from the system they created and have supported by a restoration of the wildlife once plentiful in our lovely state, by the creation of rewarding places to go, and by many programs such as conservation education, work with endangered and rare species, outdoor ethics and safety training, access to fishing waters and nature interpretive centers; and

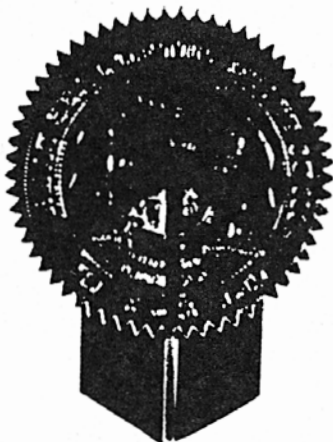
WHEREAS, a half century of conservation progress and achievement is unparalleled in the country:

NOW, THEREFORE, I, JOHN ASHCROFT, GOVERNOR OF THE STATE OF MISSOURI, in recognition of fifty years of conservation achievement, do hereby proclaim November 3, 1986, as

**FIFTY YEARS OF CONSERVATION DAY**

and urge my fellow Missourians to continue their support of our fine conservation program and to enjoy the programs and facilities they created and have supported so loyally for so long.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, this 12th day of September, 1986.



*John Ashcroft*  
Governor

Attest:  
*Roy D. Blunt*  
Secretary of State





Office of the Governor  
State of Missouri

## Proclamation

**WHEREAS**, in 1936, the citizens of Missouri voted over two to one to amend the Constitution of the State of Missouri to establish the Missouri Conservation Commission, to restore, manage, and conserve the bird, fish, game, forestry, and all wildlife resources of the state; and

**WHEREAS**, the Missouri Conservation Department, led by the Missouri Conservation Commission, is responsible for the forest, fish, and wildlife resources of the State of Missouri as a public trust for Missourians; and

**WHEREAS**, resource conditions had rapidly declined by the 1930s, with deer and turkey populations decimated, streams choked with erosion, and forests overcut and burned; today, thanks to the successful leadership of Missouri's Conservation Commission and Conservation Department, our state is known instead for providing world-class outdoor adventures; and

**WHEREAS**, 75 years later, after formally beginning on July 1, 1937, the Missouri Conservation Department continues to work with Missourians to sustain healthy forest, fish, and wildlife resources, demonstrating national conservation leadership with its citizen-created and citizen-led governance and the citizen-approved Conservation Sales Tax; and

**WHEREAS**, Missourians benefit from healthy forests, waters, and abundant fish and wildlife throughout the state, including the opportunity for future generations to use and enjoy those resources; and

**WHEREAS**, conservation makes Missouri a great place to live, work, hunt, fish, view wildlife, and experience the outdoors, and the economic impacts of fish and wildlife recreation and the forest products industry are over \$11 billion each year in Missouri; and

**WHEREAS**, the demand for conservation services continues to grow, the Conservation Department is an excellent model for enhancing partnerships at the individual, family, community, state, and federal levels; and

**WHEREAS**, citizen support has created a conservation platform here in Missouri like none other in our nation – constitutional authority and dedicated funding – to manage forest, fish, and all wildlife resources.

**NOW THEREFORE**, I, Jeremiah W. (Jay) Nixon, GOVERNOR OF THE STATE OF MISSOURI, do hereby recognize the

### MISSOURI CONSERVATION COMMISSION AND MISSOURI DEPARTMENT OF CONSERVATION

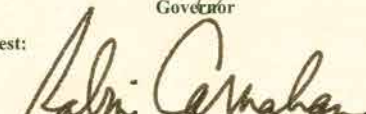
for 75 years of exemplary conservation achievements and unparalleled conservation service and encourage all Missourians to continue their support of conservation programs and their enjoyment of Missouri's forest, fish, and wildlife resources.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, this 12<sup>th</sup> day of October, 2012.



  
Jeremiah W. (Jay) Nixon  
Governor

Attest:

  
Robin Carnahan  
Secretary of State

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